

A NEW CALENDAR FOR A NEW WORLD

VOL. XII

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Harmony and Equity

THERE will always be a Christmas and there will always be a calendar. But whereas Christmas is an annual day of beauty, good will and peace, the present calendar is an annual system of disorder, confusion and discord. The two are diametrically opposed.

The Chinese word for peace consists of two words—*Ho Ping*—harmony and equity. They describe admirably The World Calendar of 12 months and equal quarters, which in arrangement abounds in harmony in the easy correlation and cooperation of the various time-units. And equity, too, is there in that every time-unit and equal quarter are permitted to function with the same justice, consideration and freedom.

People who really desire good will toward men and peace on earth, and seek these in their daily affairs at home, in their communities, state, nationally and internationally, will wish to establish the same conditions in their calendar of Time—for is not everything predicated on Time?

To retain our present time-system on the planless, irregular and changeable basis is illogical and unreasonable. It is a spender and waster of our money, time, effort and material, forbidding harmony and equity, whereas The World Calendar is a conserver of these, smoothing our daily tasks, making the wheels of life turn more easily.

Both Christmas and the calendar would benefit under the new time-plan: Christmas, because of the peace bestowed upon it by always observing the celebration on the same day and date, Monday, December 25; the calendar, because of the peace that is inherent in every part of which it is comprised, making it an equitable and harmonious whole.

How fitting that this new year of 1943 be one of preparation to ring out the old calendar and to ring in the new, by 1945. Then will the new song of The World Calendar in its rhythmic beat of 31,30,30 reach its peak with the Year-End Day—the World Holiday—on which all nations unite in a spirit of brotherhood and friendship.

Journal of CALENDAR REFORM

October, November, December
1942

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TODAY, MORE THAN EVER

This article has been translated into Spanish and Portuguese and is being circulated in Central and South America.

TODAY, more than ever before, constructive planning is needed to increase production, and to conserve time and money. Wisdom, too, tells us to look forward to the vast task of world reconstruction that lies ahead. To both these ends The World Calendar of 12 months and equal quarters has a *real* contribution to make.

Our present civil calendar is wholly inadequate. It is shifting, irregular and disordered in arrangement. Mathematically it is confusing and, in its way, is as confused as is our world today. Everywhere there is turmoil and conflict and the same is true of the calendar. Days and dates never agree. The different lengths of months—28, 29, 30, 31 days—cause irregular quarter-years of 90, 91, 92, 92 days and unequal half-years of 181 and 184 days. Months constantly change as to their number of weekdays and Sundays.

These irregularities cause unnecessary inconvenience, waste and hardship. All our affairs are based on calendar dates or days. Pay and income checks, upon which we all depend, must at times be stretched to cover a day or two more under our shifting timepiece, making budgeting in the home, in business and in government, a more difficult problem. Labor and agriculture, too, are seriously handicapped for both require exact time-planning and accurate statistics. Importing and exporting are also adversely affected. Coordination is woefully lacking in our time-system, the calendar; everything is at odds.

How can we expect governments, factories, business, schools, homes, and science in this modern world to achieve their best results? The answer is, it cannot be done. The time is certainly here and *now* to modernize the calendar, making it adequate for our many vital requirements.

Everywhere the world is becoming plan-conscious. Everything of consequence is being shaped according to an ordered plan. We are all experiencing today the bitter cost of planlessness and confusion. Obviously a well-planned World Calendar will bring economy out of waste, order out of disorder, regularity out of confusion, harmony out of discord and thus contribute to victory and peace. Our calendar must be a practical and serviceable instrument for our daily use in accomplishing the tasks which are becoming increasingly urgent and important.

The World Calendar of 12 months and equal quarters is mathematically correct and scientifically as perfect as can be devised. The equal quarters are admirably adapted to all our various activities, since in each quarter days and dates always agree. By giving to the first month in each quarter 31 days and the other two months 30 days each—a rhythmic measure of 31, 30, 30, four times a year, is made. This results in every month having exactly 26 weekdays plus Sundays. Each quarter-year of 91 days or 13

weeks or 3 months achieves perfect coordination among the various time-units—the day, the week, the month, and the quarter. The new World Calendar functions smoothly and correspondingly everything in relation to it will also function more smoothly.

Four times 91 days, however, makes 364 days. How about that 365th day? This day acts as the steadying influence wherein the calendar keeps pace with the solar year. It is December 31, as we count time today, and in the new calendar is the extra Saturday Year-End Day, the new World Holiday, December W, that follows Saturday, December 30, every year. And every four years there is another extra Saturday, the Leap-Year Day, which is another World Holiday, June W. These two days are not working days; they are the universal *new World Holidays*, observed by every nation and by every individual.

In a word, The World Calendar will contribute materially to the saving of our valuable time. It will make planning easier and more accurate for present and future activities. Business men and women, lawyers, government officials, scientists, educators, housewives, managers and laborers will have a better time-plan that will more adequately serve our many interests and those of our country.

You might say these days of conflict are not fitting for the adoption of a new calendar. But that would be a hasty and unjustified conclusion. The World Calendar is an *added* force for effective results.

The time for its adoption is the end of 1944 when both the old and the new calendars meet on the same day, Saturday, December 30. It is urgent, therefore, to plan and act NOW so that we can have The World Calendar by January 1, 1945. The time is short, it brooks no delay.

Fourteen nations—Afghanistan, Brazil, Chile, China, Esthonia, Greece, Hungary, Mexico, Norway, Panama, Peru, Spain, Turkey and Uruguay—have officially approved The World Calendar and we believe that other nations are waiting for the United States of America to take the lead. There are indications that our country is willing to assume this leadership.

You may ask this question: "What can an individual do?"

Bring the knowledge of The World Calendar to your clubs, business organizations, and friends. Speak of the new time-plan at every opportunity. Do your utmost that resolutions and letters be sent to the President of your country and to other government officials. If your country is one that has officially approved the civil World Calendar, then urge your government to indicate its desire for international action. If your government has not yet officially approved this civil calendar, then we ask that you acquaint your government authorities with the importance of the movement, have it endorsed, and urge your government, too, to seek international action.

It may seem difficult in these war days to bring about an international conference, but the endorsements of the South and Central American countries, if sent to Washington, would practically assure the adoption of The World Calendar by 1945. The Western Hemisphere will then have contributed her part in calendar-progress as did the Eastern Hemisphere in past eras. When enough thinking men and women and leading organizations ask for the adoption of this new time-plan, we shall have it. Its adoption will not only bestow an enduring benefit on our generation and on generations yet to come, but we shall not have failed civilization in this needful task that is ours to do.

OUR CRAZY CALENDAR NEEDS FIXING!

It can be Stabilized . . . and Save Retailers Millions

(From the *Department Store Economist*, November, 1942)

RETAILERS need a calendar that stays put. War plants need it even more. It would be ideal if each quarter would start on a Sunday and end with a Saturday. It would be ideal if each department's main events during the year were comparable as to dates and days of the week. Holiday dates should be synonymous with days of the week. For instance:

New Year's day should be a Sunday. Washington's birthday, February 22, should fall on the same weekday each year—Wednesday, for instance; with Decoration day, May 30, always a Thursday. In that case July 4 would fall always on Wednesday; Thanksgiving would be celebrated on the fourth Thursday, November 23; Christmas always would fall on Monday.

The particular day of the week is not important—only the fact that each holiday would always fall on the same day each year. Easter should be tied down, too, but that runs into religious complications and can be left to the churches to work out later.

Every personnel man in the country, every buyer and merchandise manager, knows how the present Gregorian Calendar complicates sales planning. Controllers and store managers know how difficult it is to budget sales, purchases, advertising, personnel requirements and expenses in general, when each quarter starts and ends on a different weekday each year. No two months, no two quarters, no two years are comparable. Eccentric Easter, lollipulating Labor Day, and the plus-or-minus interval between Thanksgiving and Christmas, are just a few of the important retail dates which ramble so much that comparisons of one year with another become almost worthless, and at best arbitrary. Monthly results in apparel departments, men's wear, holiday departments and especially anything in the food field are vitally affected by whether the month contains the same number of Saturdays and Sundays each year.

COCKEYED CALENDAR

February is more than 10% shorter than the months immediately before and after it—and any retailer knows what a 10% increase or decrease in sales does to net profit in any period. Months of the same length contain a different number of business days. Holidays which fall on Saturdays or Mondays always are less disconcerting to retailers than those which occur

in the middle of the week; yet the present calendar throws them around recklessly, to no good end.

REFORMERS GALORE

Better guys than we have reformed the calendar, and it is still not good. Old Julius Caesar fixed it in 45 B.C. with 365 days and a leap year every fourth year, added to the month, February. But his year was eleven minutes and fourteen seconds too long. That wobble ran along for 1600 years, by which time it had picked up ten days too much. Pope Gregory XIII fixed that in 1582 by dropping one leap day in every four centuries (though it ran lopsided another 200 years before we adopted it). His error factor is only 26 seconds per year, and it will take 3000 years before that accumulation equals one day, so let's not worry about it. But when Great Britain and her Colonies made the adjustment 11 days were dropped from the calendar. George Washington found that though he was born on February 11 by the calendar in use at the time, his birthday by the new calendar became February 22.

SEPTEMBER'S LOBBY WAS ASLEEP!

Politics, the villain, enters! The Romans alternated their months between 31 and 30 days starting their year with January 1. March, May, Quintilis, September, November, January, were of 31 days and the remainder 30 days. The traditional last month, February, took up the slack. Then to honor Julius Caesar they renamed Quintilis *July*. Legend has it that Augustus Caesar's clique in Congress didn't think the old gink would like being overlooked, so they named the next month August after him. Then because it wouldn't do to have Julius' month longer than Augustus' month, they grabbed a day off of September and moved it up one month, which is a neat trick if you can do it and they did.

OUR SACRED CALENDAR

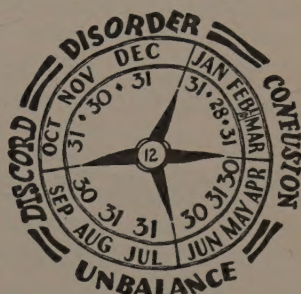
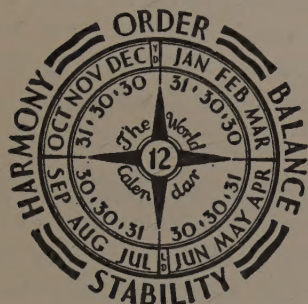
The length of the week has varied from 5 days to 10 days. The present 7-day week was ordered by Constantine the Great in 321 A.D. That is why it is a laugh to worry about changes in holidays! A couple of generations and nobody knows the difference, nor cares. Pope Pius XI admitted to Alfred Cardinal Baudrillart, Rector of the Catholic Institute of Paris who died only a few months ago (May 18, 1942), that he was inclined to admit the need for fixing the date of Easter. He was reported as of the opinion that the thing can be done and that there would be great advantages.

JUST SUITS BUSINESS NEEDS

Some progressive retailers have adopted the 13-month year for internal accounting and better merchandising control, despite its fluctuating dates and lack of uniformity. The so-called World Calendar, however, seems en-

tirely suited to retailers' needs and all retailers should join in the rising chorus of approval of it. Reproduced on these pages the new World Calendar is compared with the present Gregorian Calendar.

THE WORLD CALENDAR
OFFERS THIS TO REPLACE THIS



From these comparisons you can see how it works, better than it can be described. Each month is always the same every year. Each has the same number of business days. Each quarter is of the same length, starts and ends with the same week-day, and is directly comparable by quarters and by years. Every holiday stays fixed. More holidays fall on Sunday or Monday and could be celebrated on Monday with the least upset to retail business. Celebrations could be longer and louder.

WORLD HOLIDAY FOR FREE

The 365th day would be tacked onto December and would be a World Holiday consisting of an extra Saturday for free! It would become a world-wide "Good Neighbor" day or double New Year's day*. Each leap year the same would be true of a second World Holiday or extra bonus Saturday between June 30 and July 1. Thus even in leap years there is no upset to an orderly, businesslike calendar.

HOW TO MAKE IT WORK

Retailers are getting ready for a Thanksgiving that is set for the fourth Thursday in November, by act of Congress. This year the fourth Thursday leaves three business days before December 1. Some other year the fourth Thursday leaves six business days before December 1, when it falls on November 22. Sometimes the fourth Thursday falls so late in the month (the 28th, for instance), that there is a full week's disparity. So from year to year any comparisons between business in the Thanksgiving-Christmas interval must be done with a slide rule and a lot of ifs and buts. By The World Calendar there would be just so many days each year, and they

* EDITOR'S NOTE: The extra Saturday completes the 365-day year. It is not a double New Year's Day; it is the Year-End Day, December W. See Page 123.

would be the same kinds of days—the same number of Mondays, the same number of Saturdays, etc.

The present confusion in the calendar is akin to what existed throughout the world before the adoption of Greenwich Time. We have fixed time zones, which make for orderly travel, communication between cities, national broadcasts on split-second timing, radio networks. These we take for granted now. Equally we take for granted summer time and war time—even as radical a change as that is absorbed and forgotten in a day. Adoption of The World Calendar would be as easy to take, and as easy to get used to.

FOURTEEN NATIONS ENDORSE IT

The World Calendar is so downright sensible, so businesslike, that every business man in the country should get behind it. Certainly retailers should at once, with all the tremendous influence they have, because it is ideal for retailing. But what is everybody's business is nobody's business, consequently it has not had concerted public action. Some of that is religious prejudice against disturbing our "sacred" calendar; most of it is just inertia. Though fourteen nations are on record for The World Calendar, the United States is not. It has received the formal endorsement of religious organizations, labor unions, chambers of commerce, trade associations, lawyers, merchants and scientists. Yet no Congress of the United States, nor the President, has taken it seriously enough because the electorate and the inarticulate business interests haven't said MUST.

It just so happens that at the end of 1944 our present calendar exactly coincides with The World Calendar. January 1, 1945, would be the right date to change over. If we miss it, a long period of years must intervene before such a coincidence of calendars returns.

In this serious war year, when we are becoming accustomed to look at realities devoid of prejudices and hidebound opinions, the people who live under the present cockeyed calendar, and business men who operate under its senseless perorations, should write their Congressmen and flood the President with sincere personal letters insisting that steps be taken now to adopt the sensible calendar at the end of 1944.

Writing a piece like this is one of those thankless jobs which seems off-hand to get nowhere, end nowhere. Writer and reader cannot but sympathize with the tireless founder and active supporter of the movement, Miss Elisabeth Achelis, who has devoted a lifetime and her resources to an objective which will benefit all mankind for endless centuries. Her work is suddenly becoming appreciated, after what must have been heartbreaking delays and frustrations. Thankless? Getting nowhere? In our hearts we know it isn't so—that this is a tremendously powerful thing that must be taken seriously right now, and worked for. For once the world is ready in spirit for concerted effort in a worth-while cause, and this is one!

NOVEMBER 26th

THIS has been a singularly significant date of rejoicing and gratitude for every American; marking three important occasions in the history of Thanksgiving Day, so truly and uniquely American.

The first of these was the Thanksgiving proclamation of our first President, George Washington, father of our country, when he designated Thursday, November 26, 1789, to be observed a *national* Thanksgiving Day. This first Thanksgiving proclamation was to acknowledge the new Constitution, giving gratitude to the Almighty. "To render our National Government a blessing to all the people by constantly being a Government of wise, just, and constitutional laws, discreetly and faithfully executed and obeyed."

After frequent lapses and irregular observances lasting through three quarters of a century, a second historical Thanksgiving was declared by our immortal war President, Abraham Lincoln, liberator of the slaves and saviour of our country. Notwithstanding the stress of the Civil War, he decreed in his first Thanksgiving proclamation, in October 1863, "to set apart and observe the last Thursday of November next as a day of Thanksgiving and praise to our beneficent Father Who dwelleth in the heavens." And this Thanksgiving also fell on November 26.

To Mrs. Sarah Josepha Hale all Americans pay homage, for it was through her unflinching efforts that Abraham Lincoln awakened to the need for a united Thanksgiving and the benefit it would have for the entire country, a day originally bequeathed to them by their Pilgrim fathers. And yet, the last Thursday did not "positively settle" the day as Mrs. Hale had so fondly hoped. It invariably shifted between the fourth and an occasional fifth Thursday in November.

Again three quarters of a century elapsed before the third historical event took place. In our present year, 1942, we observed Thanksgiving for the first time on a regular day set by Act of Congress, the *fourth* Thursday in November, which was approved by another war President, Franklin D. Roosevelt. And again it was a November 26th. In his proclamation he recommended the Twenty-third Psalm as our inspiration and then said, "with faith and courage by these words, let us turn again to the work that confronts us in this time of national emergency."

One cannot but be impressed with the three remarkable coincidences of November 26ths. Was the date a preconceived design, a preordained plan? We do not know, we cannot explain. But we do observe with profound gratitude that by the acts of three of our war Presidents our *national* Thanksgiving Day received its birth, became an annual holiday, and was given a stable day of observance.

And yet, the triad is not complete. We can only observe the annual day and month, but the date still wanders, still shifts. To complete the triad of its observance, then, the established date is needed. And this is available and ready.

As Congress established the Fourth-Thursday-Thanksgiving-Day so can our war President, Franklin D. Roosevelt, establish for our nation, with other American countries or with nations of Europe and Asia, a permanent new calendar, wherein days, dates and months no longer shift but have their logical places year in and year out.

In the perpetual World Calendar of 12 months and equal quarters, Thanksgiving Day would be observed annually on the fourth Thursday in each November on its regular date, the 23d. The triad of the day, the fourth Thursday; the date, the 23d; and the month, November; would be complete.

FACTS AND FIGURES

By MORTON SAVELL

Institute of Public Relations

IN Webster's International Dictionary, the word *calendar* is defined as meaning "a system of fixing the beginning, length, and division of the civil year; an orderly arrangement of divisions of time as years, months, weeks, and days, adapted to the purposes of civil life."

In the light of that definition the time-measuring device that now rules our days and weeks and years falls woefully short of its name.

Simple arithmetic reveals that, far from establishing a time-measurement adapted to the purposes of civil life, the Gregorian calendar seems to have adapted itself, with the aid of a Leap-Year Day every four years, to the astronomical and immutable fact that the length of the solar year—to which, of course, any self-respecting calendar would at least try to conform—is 365 days, 5 hours, 48 minutes, and 46 seconds. And, having attained that end, our present civil calendar washes its hands of details and says: "Well, there you are. Now make the best of it."

Let's give the matter a close-up.

Consider, for example, the dictionary's first set of specifications—that a calendar is "a system of fixing the beginning, length, and division of the civil year." As we have seen, the length of the year is beyond any calendar's control. No calendar can claim credit for that. And as for "fixing" the year's beginning and its division, can any arrangement be called a system and can it be said to have got off on the right foot toward fixing anything at all when, under its provisions, the very first day of the year may fall—and, indeed, does fall—on any unsuspecting day of the week from Sunday through the following Saturday? That, it would appear, is a job of fixing that needs re-fixing.

Now look at the dictionary's second set of specifications—that a calendar worthy of the name is "an orderly arrangement of divisions of time as years, months, weeks, and days, adapted to the purposes of civil life." Letting stand for the moment the presumption—and it promises to develop into the kind of presumption that lawyers call violent—that the thing we use as a calendar adapts itself to the purposes of civil life, let's look at this business of time-divisions.

With the day and its length, as with the solar year and its length, the calendar has nothing to do. The day is 24 hours long; and no calendar would wish to fix or unfix that. Readily we concede that the seven-day week conforms to man's convenience. We come, now, to the months; and here we find an arrangement at least faintly suggestive of the effect of an explosion in a shingle factory.

For instance, look at two of the months that, in the present civil calendar, stand side by side—February and March. Except in Leap Years, February presents 28 days, and March 31. In times such as these, we are intensely concerned with days that are productive—with week days. Hence, for reasons purely practical, we shall subtract the Sundays.

Of Sundays, the present February always has four; but the present March sometimes has four and then again five. And now we pick up our pencils—

<i>Non-Leap Year February</i>		<i>March (Easter in April)</i>	
Total of days	28	Total of days	31
Sundays	4	Sundays	5
Week days	24	Week days	26

Comparison

March week days	26
February week days	24
The difference	2
And the percentage — 24) 2.00 (.083	

Thus, under the most favorable of circumstances, the variation of week days between February and March runs to 8.3 per cent. Nor is that all.

Sometimes March, in its infinite variety, retaining its 31 days, presents Sundays to the number of only four. And then we get—

<i>Non-Leap Year February</i>		<i>March (Easter in April)</i>	
Total of days	28	Total of days	31
Sundays	4	Sundays	4
Week days	24	Week days	27

Comparison

March week days	27
February week days	24
The difference	3
And the percentage — 24) 3.00 (.125	

And thus, when the present calendar sets out to show us what it can do, it presents, between two adjoining months, a variation in week days of 12.5 per cent.

And February, itself, our shortest month, because of holidays, can vary from 4.5 per cent to 9 per cent from year to year, the degree of variation depending upon whether Washington's Birthday or Lincoln's happens to fall on a Sunday.

Eccentric February

<i>Regular year</i>		<i>Regular year</i>	
Total of days	28	Total of days	28
4 Sundays and 2 holidays	6	4 Sundays and 1 holiday observed	
Week days	22	on week day	5
		Week days	23
			22
		The difference	1

And the percentage — 22) 1.00 (.045

<i>Regular year</i>		<i>Leap year</i>	
Total of days	28	Total of days	29
4 Sundays and 2 holidays.....	6	4 Sundays and 1 holiday observed	5
Week days	22	on week day	24
		Week days	22
		The difference	2

And the percentage — 22) 2.00 (.09

Let's look at December and January, each with 31 days. But a December may have four Sundays and January—its next-door neighbor—have five. And here our pencil discloses that, as between these two months, the variation in week days runs to 4 per cent.

<i>December</i>		<i>January</i>	
Total of days	31	Total of days	31
4 Sundays and 1 holiday	5	5 Sundays and 1 holiday.....	6
Week days	26	Week days	25

<i>Comparison</i>	
December week days	26
January week days	25
The difference	1

And the percentage — 25) 1.00 (.04

Perhaps you think all this is due to the fact that we are dealing with the year-end holiday season. Not at all. Here is what happens with two ordinary months, July and August. Sometimes, of course, July will have four Sundays and a holiday which does not fall on a Sunday. August has no regularly observed holidays. So, here is the way it looks:

<i>July</i>		<i>August</i>	
Total of days	31	Total of days	31
4 Sundays and 1 holiday.....	5	5 Sundays and no holiday.....	5
Week days	26	Week days	26

No difference in percentage

But in another year these two innocuous and consecutive months may turn up with July having five Sundays and a holiday, or 6 days out of the 31, while August just goes along with only four Sundays and, as usual, no holiday, and then we have this unhappy situation:

<i>July (1938)</i>		<i>August (1938)</i>	
Total of days	31	Total of days	31
5 Sundays and 1 holiday.....	6	4 Sundays and no holiday.....	4
Week days	25	Week days	27

<i>Comparison</i>	
August week days	27
July week days	25
The difference	2

And the percentage — 25) 2.00 (.08

So, you can see that it isn't just the holidays that make the present civil calendar unreasonably disorderly.

Do you care for combinations and permutations? Take a half-day off, some time, and try your hand on the calendar. It's a labyrinth of perplexities.

You'll find, in fact, not one kind of calendar, but a total of 14 combinations or kinds of calendar—this because there are seven days in the week, all of which collide with different month-dates from time to time. And then, in Leap Year, we add the 29th of February, which, in an onset of caprice, may fall—and, indeed, does fall—on any of the seven week days.

There are, thus, 28 combinations or kinds of months—this because a month may number 28 days, 29, 30 or 31 and each of the seven week days, from time to time, falls on a different month-date.

Is this a fixed system? Is this an orderly plan? With variations in week-day totals, between adjoining months running as high as 12.5 per cent, with the months offering each a different number of week days, is this an orderly arrangement for measuring our time? Is this a proper time-keeper for our present time?

As between Webster's International Dictionary and what we *call* the calendar, something needs adjusting. Something, truly, needs fixing. It is too late to do anything about the dictionary. It is not too late to do something about the calendar.

The World Calendar of 12 months and equal quarters, with the uniformly recurring sequence of 31, 30, 30 days in the months, each containing 26 week days plus Sundays, does do something about it by meeting Webster's exacting definition, for it provides a "system of fixing the beginning, length, and division of the civil years" and is "an orderly arrangement of divisions of time." And certainly it is "adapted to the purposes of civil life."

CALENDAR CONTRAST CARD FOR 1943

SIMILAR to last year's ready-reference calendar card, there is now ready for distribution a new one, showing The World Calendar with its many advantages, and the present Gregorian calendar for 1943 with its disadvantages.

Your copy will be sent upon request, and please do not hesitate to ask for several to pass on to friends.

RESOLUTIONS

Unanimously adopted by the

LIONS CLUB OF WEST CHESTER, PENNSYLVANIA

December 1, 1942

Whereas: The present Gregorian Calendar, which was the first to be constructed in conformance with complete knowledge of the true length of the Solar Year, has been in use in the English speaking countries for less than 200 years, although the use of calendars by mankind has covered a period of nearly 9000 years; and,

Whereas: The present Gregorian Calendar has many defects in construction which render it inefficient and cumbersome in its application to the needs of modern international economic life; and,

Whereas: The revision of the Gregorian Calendar in a manner acceptable to all civilized nations of the world would promote INTERNATIONAL HARMONY in economic, industrial, governmental, scientific, educational, financial, legal, agricultural and religious affairs; and,

Whereas: Fourteen nations of the world have already signified their official endorsement of the World Calendar, which has been prepared after painstaking scientific study and research through the efforts of the World Calendar Association, of New York; and,

Whereas: The most logical and convenient year for the adoption of the proposed revision of the present Gregorian Calendar by the nations of the civilized world will be the year beginning January 1, 1945; and,

Whereas: In the period of economic upheaval such as exists today during the present world conflict of the first magnitude every effort must obviously be directed towards a plan for far-visioned policies calculated to bring about the greatest harmony in economic, industrial, governmental, scientific, educational, financial, legal, agricultural and religious activity among nations,

BE IT RESOLVED THAT the West Chester Lions Club, a component part of an International Organization, founded for the express purpose of fostering, stimulating and perpetuating policies directed towards INTERNATIONAL GOOD WILL, having made a careful study of the principles of the World Calendar as outlined by the President of the World Calendar Association before a regular meeting of the Club, and further studied by a special committee appointed for this purpose by the Club, HEREBY ENDORSE the World Calendar as a noble and profoundly practical measure towards the accomplishment of the objective of sound International economic good fellowship upon which permanent World Peace must depend;

AND BE IT FURTHER RESOLVED: That the West Chester Lions Club respectfully submit this RESOLUTION to the State Association of Lions Clubs and the International Association of Lions Clubs with the earnest recommendation that their further official endorsement be placed upon this RESOLUTION, and that this be forwarded to Congress and the PRESIDENT OF THE UNITED STATES OF AMERICA for immediate Executive action which will join our Nation with the fourteen other nations of the world who have already endorsed the World Calendar as a vital step towards International stabilization of the most vital economic asset of the civilized world—*TIME*.

Respectfully submitted,

Committee on Resolutions of Endorsement of the World Calendar:

(Signed)

GEORGE B. COMFORT
WILLIAM E. PARKE

W. W. MENHENNETT
G. RAYMOND RETTEW
HENRY PLEASANTS, Jr., Chairman.

SOME ANOMALIES OF TIME AND ITS MEASUREMENT

By DR. CLAUDE E. ZOBELL

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IN a sequence from Walt Disney's version of Pinocchio the old wood-carver, Gepetto, asks "What time is it?" when he is virtually surrounded by an awe-inspiring array of clocks which are striking the hour. Although this sequence provokes a well-deserved laugh, the question might be asked by anyone in all seriousness under similar circumstances. In spite of the precision of modern timekeeping mechanisms, none are synchronized perfectly with the solar system. Contrary to popular conception the movements of the earth and the moon which give us our fundamental units for the measurement of time are erratic and irregular.

For astronomy there is no standard, uniform or absolute timekeeper. In terms of the arbitrary units of man, the earth completes a rotation once a day but due to nutation and the gravitational influence of the moon, the rate of rotation is not constant. Around the first of November mean solar time as reckoned by man is about $16\frac{1}{2}$ minutes faster than apparent sun time as indicated by the position of the sun relative to the earth, and it is nearly $14\frac{1}{2}$ minutes slow in the middle of February.

Some days (the time required for the earth to complete one rotation or the period from sunrise to sunrise) are several seconds longer than 24 hours and some are several seconds shorter. Paradoxically the longest day of the year occurs in the winter when the period from sunrise to sunrise is approximately 24 hours 30 seconds although the daylight day, the period from sunrise to sunset, is the shortest of the year. As a matter of fact, only four days each year are exactly 24 hours long.

The length of the day is increasing from year to year. Due to the "braking" or frictional resistance of the tides caused primarily by the moon, the rate of rotation of the earth is gradually decreasing. This increasing length of day or "slowing down of Time" is not especially alarming because it amounts to only about $\frac{1}{1000}$ of a second per century. However, within geological time the length of the day has increased no less than four hours. At the same time the motion of the moon around the earth which gives us our month is accelerating at the rate of about 11 seconds per century. According to the Astronomer Royal, H. Spencer-Jones, in *remote time* the day and the month were both equal to about four hours, in our present reckoning, and in the *remote future* the day will be about 47 times as long as at present.

These observations may cause one to wonder if the movement of the celestial clock is changing or if the rate of the passage of time itself is changing. We might meditate with Longfellow: "What is Time?—The shadow on the dial, the striking of the clock, the running of the sand, day and night, summer and winter, months, years or centuries—these are but the arbitrary and outward signs—the measure of time, not Time itself." Although we often speak of losing Time or gaining Time or wasting Time or of not having Time,—just what is it that we gain or lose or waste or don't have?

Time is not apparent to our ordinary senses. We can neither see it nor hear nor feel it. In the words of Colton, "Time is the most indefinable yet paradoxical of things; the future has not come and the present becomes the past while we attempt to define it." Time exists and expires simultaneously. The time-span of consciousness, NOW, which expires immediately, is of variable duration for every individual. As far as is known to mortal man, Time has no beginning and it has no end,—or does it? Some regard it as being cyclic like the movement of the hands on the clock or the revolution of the earth around the sun or some other longer cycle.

Recent mathematical thinkers present proof that Time is the fourth dimension of space, although it should be regarded merely as a coordinate in discussing space. Unlike the more tangible dimensions of length, breadth and width, we cannot place a finger on any given point of Time nor can we go back and forth, up and down or in and out of Time like we can the other three dimensions. Instead Time is always going onward irresistibly. The law-makers in Washington may "stop the clock" or the clock might be turned backward or forward for Daylight Saving Time or when crossing Standard Time zones, and there are Biblical records of the sun standing still in the heavens for nearly a day (Joshua 10:13) or even going backwards (II Kings 20:11), but insofar as we know the march of Time is not altered. *Time* could say like Tennyson's babbling Brook, "Men may come and men may go but I go on forever."

Since there are so many concepts concerning what Time is, when it started and when it will end, how fast it is passing, whether it is passing at a constant rate or if it is cyclic and bends back on itself, it is little wonder that there is so much confusion concerning the measurement of Time. According to Benedict Spinoza, "The measure of time is nothing but a mode of thought or rather of imagination." Although some people can estimate the time of day with an uncanny sense of accuracy, most of us find it necessary to consult the clock many times each day. Time passes so slowly for a child, particularly before Christmas or other festive occasions. Likewise the "watched pot never boils" for the man who is anxiously waiting for an important message or for the six o'clock whistle to blow. For the sick and the suffering each day seems an eternity. Some-

times in a dream one has the sensation of falling for hours although psychologists tell us that most dreams are of only a few seconds' duration.

On the other hand, Time slips past incredibly fast for lovers when together, and the clock seems to fairly run away with itself when one has plenty of enjoyable work to do with no worries. With advancing age Time seems to speed by faster for most people, so fast that we can't remember how it drags for children. Upon awakening from a sleep of exhaustion or from the influence of certain somniferous drugs it seems that one has been asleep only a moment. Then there is the often told story of the young man who was accidentally sealed in the tomb of his deceased fiancée. Being aware of his plight and realizing that it might be several days before he would be missed when a searching party might be sent to the tomb where he was last seen, he made provisions to prolong his life as long as possible. He rationed the water found in the flower vases a swallow at a time and in the complete darkness of the tomb he devoured candle butts to sustain life. Finally when the last of the candles had been eaten and all of the water was gone, he resigned himself to death beside the coffin of his loved one. Then as hopes were fading, a shaft of light was suddenly admitted. A member of the funeral party had returned to the tomb upon missing the young man when the carriages got home.

These examples should suffice to indicate that man is a rather poor judge of the passage of Time. If one ponders a while it might also make him wonder if Time passes at a constant uniform rate or if it goes sporadically slower or faster as do some of the celestial bodies.

For cold-blooded animals whose lives are not governed by clocks or calendars the rate at which Time passes is largely a matter of the temperature of their surroundings. At a favorable temperature the life-span or generation time of bacteria or protozoa may be no more than 20 or 30 minutes but at low temperatures these organisms may live for centuries before reproducing. On a cold day ants or bees move very sluggishly, if at all, and Time for them must be at a standstill, but with the coming of the warmth of summer, these insects fairly dart about as Time now has wings of lightning. Similarly in his *Man, The Unknown*, Carrel postulates that the "inward time-clock" or brain-clock of man runs faster at higher temperatures although the body temperature range of man is much narrower than that of insects and other cold-blooded animals. Many men regard Time and distance as synonymous and for those, Time must be enormously accelerated by modern travel conveniences.

As progressing civilization has required a closer synchronization of his activities with other events, man has continued to perfect devices for measuring time. The sun-dial, clepsydra and hour-glass have been replaced by clocks, watches and chronometers, some of which are accurate with an error not exceeding one second per day for a period of six months.

Mechanisms which are more accurate timekeepers than the earth itself are not uncommon in this age. However, it seems to be an anomalous situation that while so much attention has been devoted to the perfection of devices for the measurement of seconds and minutes, we continue to use an old-fashioned, unbalanced, unstable calendar. It has been claimed that the calendar is not an indicator of Time at all but of ceremonials.

Except for a slight modification of the Leap-Year Rule, we are still using the same calendar which has been in use for nearly 2,000 years. It is as outmoded as the Time concepts or the mechanical timekeepers of 1582, the year of the Gregorian calendar reform. At that time it made little difference to anyone whether there were 24 or 27 working days in a month. Not many people knew whether there were 28 or 31 days in the current month when it didn't make much difference to them even what month it was. Bookkeepers and statisticians of two or three centuries ago were not inconvenienced by quarters of unequal length or by the fact that the first half of the year is three days shorter than the second half! Nor did it matter much if there were 52 Saturdays in some years and 53 in others. In fact, very few had occasion to use a calendar as late as 1582 or for two or three centuries thereafter. However, times have changed whether Time itself has or not, and further calendar reform is urgently demanded by business men, executives, law-makers, educators, scientists, ecclesiastics and laborers.

Unfortunately the movements of the earth and the moon which give us our day, month and year are not only somewhat erratic but they are not well synchronized for calendadic purposes. Twelve lunar months, each of approximately $29\frac{1}{2}$ days, give a year of only 354 and a fraction days while there are $365\frac{1}{4}$ days in a mean solar year. Consequently many irregular and unscientific corrections have been made by various calendar systems to keep the lunar and solar periods together. The Jewish calendar provides for 12 months of 29 or 30 days' duration and a 13th intercalary month added seven times in 19 years. Thus the ordinary Jewish year has 353 to 355 days and the leap year 383 to 385 days depending upon astronomical and ecclesiastical regulations. With this system the Jewish New Year, Tishri 1, may fall between September 5 and October 5.

The Egyptian calendar had 12 months of 30 days each plus five extra days. No provisions were made for leap year so each year started an average of one-fourth of a day earlier than the succeeding year resulting in a cycle of 1,460 years. The Greek soli-lunar calendar had 12 months averaging $29\frac{1}{2}$ days each and the months, which were named after Greek Gods, were divided into three periods of approximately 10 days each although a seven-day week had been used much earlier by the Hebrews.

Apparently the early Roman calendar had only ten months which were designated numerically from Primus, the first, to December, the tenth.

However, the first four months were soon named Martius, Aprilis, Maius and Junius. In his *Romance of the Calendar*, Wilson suggests that no attempt was made to measure time during the most wintry period of the year. Later the 11th and 12th months, Januarius and Februarius, were added to round out their 355-day lunar year. However, since there were actually more than 355 days in the year, December or any other month would come in the winter sometimes and sometimes in the summer. Pontifices undertook arbitrarily to make the necessary intercalary corrections by adding or subtracting days indiscriminately or by the use of an additional 13th month, Mercedonius, as suggested by the astronomers or dictated by the politicians, resulting in hopeless confusion.

Upon the counsel of the Egyptian astronomer, Sosigenes, Julius Caesar had $10\frac{1}{4}$ days added to the year bringing the number up to $365\frac{1}{4}$. The ten extra days were distributed among the months to give them essentially the same number of days as they have at the present time and the four-year leap-year rule was introduced. Later Quintilis became July in honor of Julius Caesar who was born in this month, and Sextilis became August in honor of Augustus Caesar. It is said that for a time April was called Neroneus for Emperor Nero, May was called Claudius and September was called Germanicus, but Church influence squelched these names. While it is fortunate that this custom of honoring Roman emperors by naming months for them did not prevail, anomalously at the present time September, October, November and December, derived from the Latin for seven, eight, and nine and ten, are now the ninth, tenth, eleventh and twelfth months, respectively. The leap-year rule of the Julian and Augustan calendars was based upon the premise that there are $365\frac{1}{4}$ days in the year. Since the mean solar year actually has only 365.2422 days, the sun was ten days ahead of the calendar by 1582. Therefore, in an 800-page treatise explaining the astronomical, civil and ecclesiastical features, Pope Gregory XIII had the calendar set ahead ten days so the vernal equinox fell upon March 21 instead of March 11, and our present leap-year rule was adopted: an extra day in February every fourth year except at the century unless the century is a multiple of 400.

The arbitrary manner in which the calendar developed may account for some of its anomalous features. Although several of the names of the months and most of the days are of pagan origin, they have been adopted by Christianity. The year begins on neither a solstice, an equinox, the beginning of a season, the birthday of Christ, nor at any other logical time. The shortest day of the year is December 22, but the year begins ten days later. March 25 was the beginning of the Roman year until 153 B.C. March 25 is still used by the Bank of England as the beginning of its fiscal year and also by the Church of England.

In the countries of the Western Hemisphere the civil day begins imme-

diately after midnight when most people are asleep. The Hindu day starts at sunrise, and the Jewish day starts at sunset the exact time of which varies with season, latitude and the earth's topography. When traveling eastward we set our watches ahead an hour for each Standard Time zone until the International Date-Line is crossed when we lose 24 hours. The reverse is true when we travel west. This supplies the answer to the old conundrum of how there could be ten Sundays in February: for commuters crossing from Siberia to Alaska each week by starting the voyage on Sunday, February 1, in leap year.

Although the month is named for the moon, the present-day calendar is not synchronized with the movements of the moon and it is virtually impossible to create a civic month which would be so synchronized. The Gregorian calendar is exclusively solar but the moon continues to rule many ecclesiastical days such as Easter, Lent, Palm Sunday and Good Friday. Easter may fall any time from March 22 through April 25. Very few people know when it will come without consulting a marked calendar. Although Easter is the annual celebration commemorating the Resurrection of Christ, the day is of pagan derivation.

Even the designations B.C. and A.D. are anomalous, the former abbreviating English words and the latter, *Anno Domini*, Latin. Incidentally, calendar-makers neglected to consider the time from the year 0 to the year 1 A.D., or in other words there is no year named 0. The year 1 B.C. is followed by the year 1 A.D.; so since 10 B.C., for example, 1,951 years have elapsed and not 1,952 years. This is often a source of error in calculating time. Astronomers use their own system of reckoning time.

In school we are taught that there are 52 weeks in a year while actually there are $52\frac{1}{7}$, or $52\frac{2}{7}$ in leap year. In recording weekly statistics it is necessary to show that there are 53 weeks in some years, or in other words an intercalary week must be introduced to keep the weeks synchronized with the years. More serious complications arise from the fact that the first *half* of the year contains 181 or 182 days while the second *half* is 184 days long. Similarly a quarter-year ranges from 90 to 92 days in length!

The problem is made more bewildering by the fact that throughout the world scores of different calendars are in use, most of which are more inconsistent than the Gregorian calendar. The Time Capsule (see *Science*, 92: 301, 1940) which was designed to convey a record of 1939 man to 6939 man, 5,000 years hence, had the date recorded on the Gregorian as well as the Chinese, Mohammedan, Jewish and Shinto calendars. In the event none of these calendars survives (and it is hoped that they will all be replaced by The World Calendar within this decade), provisions were made for reckoning the year by astronomical data. The fact that there are so many calendars in use indicates that none is entirely satisfactory.

Some of the incongruities of the Gregorian calendar are corrected by

the "13-month calendar" which proposes dividing a 364-day year into 13 months of 28 days each. The 365th day would be treated as a separate "Year Day" for special observance as a state or church holiday as would "Leap Day" in leap years. Under this plan all months are of equal length and all begin on Sunday and end Saturday, so each day of the month would always fall on the same date. The chief disadvantage of the "13-month calendar" is that besides requiring a radical shifting of dates and the introduction of a new month, quarters and half-years do not terminate at the end of a month. It is being discarded as its advocates find it impractical.

The World Calendar does not have these latter objections. It retains the 12 months of the Gregorian calendar, merely shifting a few days of certain months so that each quarter will always begin on Sunday and end on Saturday. The first month of each quarter will have 31 days and the next two months 30 days each, giving a regular rhythmic 31-30-30 for each quarter. Each day of the month will always fall on the same date. Each quarter has 91 days, including exactly 13 Sundays and 78 weekdays. The half-years are equal in length. The 365th day of the year will be regarded as an extra day, a special holiday, coming between Saturday, December 30, and Sunday, January 1. It could be called "Year-End Day" and designated December Y or 31. In leap years "Leap-Year Day" will be between Saturday, June 30, and Sunday, July 1, and could be designated June L or 31. Year-End Day and Leap-Year Day will be international holidays. The World Calendar provides that there will always be the same number of weekdays and Sundays in the year. One of its chief advantages is the coordination of all the different time units at the close of every quarter.

In its simplest perpetual form The World Calendar can be written as follows:

	S	M	T	W	T	F	S
Jan.	1	2	3	4	5	6	7
Apr.	8	9	10	11	12	13	14
July	15	16	17	18	19	20	21
Oct.	22	23	24	25	26	27	28
	29	30	31				
Feb.				1	2	3	4
May	5	6	7	8	9	10	11
Aug.	12	13	14	15	16	17	18
Nov.	19	20	21	22	23	24	25
	26	27	28	29	30		
Mar.						1	2
June*	3	4	5	6	7	8	9
Sept.	10	11	12	13	14	15	16
Dec.*	17	18	19	20	21	22	23
	24	25	26	27	28	29	30*

*June L or 31 is Leap-Year Day, in leap years.

*December Y or 31 is Year-End Day. [See Page 123.]

From this it will be observed that the quarters are identical. The first month of each quarter (January, April, July and October) always begins on Sunday, the second month of each quarter (February, May, August and November) always begins on Wednesday, and the third month of each quarter (March, June, September and December) always begins on Friday and ends on Saturday. Unlike the Gregorian calendar which often requires six lines to record the days of the month, or else the doubling up of dates such as 23/30 or 24/31, The World Calendar never requires more than five lines.

The advantages of the balanced, perpetual, simple, harmoniously arranged World Calendar for business purposes, schedule-makers, educational institutions and all whose lives are influenced by the calendar are obvious. Only tradition and apathy stand in the way of the adoption of this calendar which has been designed for Twentieth Century conditions.

Although, because of its vagaries, we may not know what Time is or even what time it is, and although minutes and months may be only arbitrary units of Time, which neither man nor the moon measure with absolute precision, so long as modern man has learned to rely upon his clock and calendar to enable him to synchronize his activities with other events, he deserves the best. Present-day clocks and watches leave little to be desired; The World Calendar is a long awaited improvement.

Previous issues of the *Journal of Calendar Reform* as well as the following references have been consulted freely in the preparation of the foregoing article.

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DECEMBER W—JUNE W

WITH the New Year, 1943, The World Calendar presents to the world the Year-End Day and the Leap-Year Day—the two new World Holidays—dated as December W and June W.

These one or two extra days were first conceived by an Italian priest, Abbé Mastrofini, in 1834; they were named blank days, given no day in the week and no place in the year. They belonged to the year, yet were outside it. As the name implied, their position was untenable and unenviable. It was therefore not surprising that opposition arose to these negative days. They had no appeal. For a long time there was comparatively little mention of a new calendar, it rested in oblivion. The thirteen-month plan by Auguste Comte, cluttered by the many new names given it, with the 365th day dedicated to the “dead” and the occasional extra day, the 366th, in leap years dedicated to “eminent women” did not improve matters. Then in 1887 the French Astronomical Union revived the subject and again the one or two blank days came to the fore only to receive the same disfavor.

It was not until the League of Nations took up the question of calendar revision that these seeming stepchildren and outcasts were given new names—intercalary or supplementary days—but again without a day in the week or a place in the month. They still remained outside the pale, their true value hidden and still unknown. They were veritable Cinderellas.

But The World Calendar, playing the role of the Prince Charming, freed them from neglect and distasteful opposition, and elevated them to their true worth and station. They were given, from that time forward, their rightful places—the extra Saturdays of the week, their months December and June, and their dates December Y or 31 and June L or 31. December Y designated the 365th day of the year as the Year-End Day, and June L designated the 366th day in leap years as the Leap-Year Day. Their mission was that of World Holidays uniting nations, races, peoples and faiths as one in the universal bond of time. They symbolized, in fact, the “healing leaves of nations,” so beautifully described in relation to the tree of life in the last chapter of the Bible.

So far, so good. They grew stronger in favor and received greater respect in their new-found service to the human family. But something was still lacking. Their dates had not yet received a common denominator. December Y, the Year-End Day, differed too greatly in the various countries where the last day of the year was called New Year’s Eve or Sylvester. And likewise June L, the Leap-Year Day, did not serve countries where this day is known as Bissextile.

Now once again The World Calendar recognizing the global aspects of

these World Holidays and their increased significance in the world today, has bestowed upon them their rightful day and date—the extra Saturday, December W, every year and another extra Saturday, June W, in leap years.

The two *W*'s are thus all inclusive—The World Calendar, the World Holidays, for World Service. At long last they have found a common denominator—the letter *W* which in the Northern tongue means *world*, *welt*, etc., and in reverse the letter *M* which in the Latin tongue means *monde*, *mundo*. With their newly acquired dates, December W and June W, the Year-End Day (extra Saturday) and the Leap-Year Day (another extra Saturday) have now cast off the unenviable Cinderella-like quality and have become the princely and honored World Holidays. Their world status now rests secure, and from within their orbit of world service they invite world acceptance.

Jajo!

(with apologies to BINGO!)

Eight months have thirty days, son,
The last two in each quarter;
And that leaves four with thirty-one,
For you to remember, daughter!

Now, how will you remember,
From January to December?
Here's an easy way to know—
Just think of—*Jajo!*

J for January
A for April
J for July
O for October

Four quarters make a dollar,
Four quarters make a year,
The first month in each quarter
Is *Jajo!*, my dear!

A Year-End Holiday is tossed in free
After December thirty,
A Leap-Year Day at the end of June
Completes a plan most worthy.

JOE GUINEY

OBITUARIES

WILLIAM M. KINGSLEY, Chairman of the Board of the United States Trust Company of New York, former Treasurer of New York University, and one of New York's most prominent humanitarians, died on September 7th. He was 78 years old. With Mr. Kingsley's death The World Calendar Association loses one of its most valued friends who, by becoming a member of its American Advisory Committee, made available to the Association the benefit of his support and advice.

Other deaths among the membership of The World Calendar Association include: Professor Frederic T. Bioletti, University of California, Berkeley; Reverend George Schulz, Racine, Wisconsin; Henry Paul Busch, Philadelphia; Reverend Eben F. Francis, South Amherst, Massachusetts; Dr. C. W. Daugette, Educator, Jacksonville, Alabama; Paul Price, Publicist, New York City.

AGAINST EXTRA DAYS!

By DR. ABRAHAM ADOLF FRAENKEL

Professor of Mathematics, Einstein Institute, Hebrew University, Jerusalem

The following article received from Jerusalem is a clear statement from a distinguished thinker. While it does not represent the views of the *Journal of Calendar Reform*, it is offered to *Journal* readers in a spirit of fairness, with factual comments.

THE movement for Calendar Reform and its principal bearer, The World Calendar Association, has great merits, and the realization of many of its aims should be desirable. The differences between the lengths of a month, which are being neutralized by the Reform, derive historically from contingencies and give rise to inconvenience in practical life. The Christian Churches seem to face positively a relative stabilization of Easter for about the second Sunday in April. That would involve great practical advantages; on the other hand, the historical arguments (the coinciding of the Jewish Passover with the first full moon after the spring equinox, and the relation between Easter and Passover according to the Concilium of Nicaea) cannot be decisive¹.

On the other hand, I wish to justify the opinion that serious arguments are in opposition to the extra days and to the discontinuity in the sequence of weeks, implied by the extra days²; arguments of such importance, that they might prevent the introduction of The World Calendar within a reasonable course of time—a fact everybody would be sorry for. The arguments are based on three aspects: the chronological, the religious and the practical one.

Chronological: Astronomers in particular³, but also historians⁴ have often stressed the point of how regrettable it would be, if the periodicity of the week of seven days, which has been undisturbed since thousands of years, were interrupted. We know that a Monday of many centuries ago

¹ As stabilization of Easter is solely a religious matter and outside the reform of the civil calendar, The World Calendar Association leaves this matter to the religious authorities for decision.

² The one or two extra days were conceived by an Italian Catholic priest, Abbé Mastrofini, in his booklet dealing on the matter, 1834; it received three *Nihil Obstat*s and two *Imprimatur*s of his bishop.

³ The International Astronomical Union, Commission 32, in 1922, approved the extra days in the new civil calendar and favored the 12-month revision. See *Journal of Calendar Reform*, 1932, Page 78. The British Astronomer Royal, Dr. H. Spencer-Jones, approves The World Calendar. See *Journal of Calendar Reform*, 1938, Page 65. Dr. William E. Castle's questionnaire to members of the National Academy of Sciences, which includes astronomers, showed that 76 per cent favored the new civil calendar. See *Journal of Calendar Reform*, 1942, Page 10. Resolution approving The World Calendar by the American Association for the Advancement of Science. See *Journal of Calendar Reform*, 1936, Page 55.

⁴ James Truslow Adams, foremost American historian, favors the new time-plan. See *Journal of Calendar Reform*, 1937, Page 113. Dr. Dixon Ryan Fox, President of Union College, Schenectady, New York, states: "Future historians would thank us if we could place the dates so that the weekday and the month-day always came together. For example, if an historian finds the date September 13, he immediately knows that it was on Wednesday in the middle of a week. This might give a different interpretation to an event than would be given if the date were September 11, which he would know happened directly after a Sunday." See *Journal of Calendar Reform*, 1940, Page 46.

differs from a Monday of this year by a number of days divisible by seven¹. Furthermore, the weekday is the same for the people of the various nations and religions. (Cf. also Professor W. L. Kennon in this *Journal*, 1940, p. 183.) This universality and periodicity would be definitely disturbed by the extra days. It may be sufficient, moreover, to refer to what has been pointed out by Professor S. Brodetzky (of Leeds University): *The Jewish Forum*, Vol. X, p. 374, 1927.

Religious: I am not authorized to express a view about the attitude of Christian Churches to an interruption of the seven days period by extra days. Many symptoms show that, in any case, the Holy See takes a negative position in this matter. Indeed, it has always expressed its view in respect to a *relative* stabilization of Easter, intrinsically excluding the *absolute* stabilization implied by extra days. (Cf. the article of Abbé Chauve-Bertrand, this *Journal*, 1941, p. 10.)²

The attitude of the Jewish faith is diametrically opposite to the conception inspired by Dr. H. W. Bearce's article (this *Journal*, 1940, p. 106). Transferred from Saturday to the Hebrew Sabbath, the extra days would mean a clear violation of the biblical commandment, to count six days³ in every case and to rest on the seventh—a commandment which is kept so rigorously as to produce a large literature in respect to passengers crossing the Pacific in the one or the other direction (change of date)⁴. Dr. J. H. Hertz, the Chief Rabbi of the British Empire, as well as Dr. I. Herzog, the Chief Rabbi of Palestine, have therefore expressed public protest against any reform containing extra days, both orally and in pamphlets.

It is true, as Dr. Bearce mentions, that for their own religious purposes the Jews use their own calendar, a luni-solar calendar which is most interesting from the mathematical point of view. Nevertheless the extra days vitally affect the observing Jew who keeps away from work and business on Saturday (which is, by the way, only half a working day in many countries); his Sabbath would coincide every year with another weekday.

¹ In chronological reckonings the day is rarely mentioned, merely date, month and year.

² The Universal Christian Council for Life and Work, at Geneva, the Protestant Episcopal Church, the Council of Bishops of the Methodist Church have approved The World Calendar. The Western European representative of the Eastern Orthodox Church has approved it also, and the Vatican has frequently said that there exists no dogmatic objection to calendar reform.

During the pontificate of Pope Pius X, the International Congress of Chambers of Commerce received, in 1912, the following statement: "The Holy See declared that it made no objection but invited the civil powers to enter into an accord on the reform of the civil calendar, after which it would willingly grant its collaboration in so far as the matter affected religious feasts." See *Journal of Calendar Reform*, 1942, Page 81.

The former Lord Archbishop of Canterbury has officially declared himself in favor of calendar reform. See *Journal of Calendar Reform*, 1936, Page 13.

Abbé Chauve-Bertrand states: "Everything living develops and changes; we must be continually abandoning something of the past in exchange for something better in the future; the most ancient and venerable of traditional institutions must themselves be modified from time to time; and more than once people have regretted that reforms did not come about when they were first desired." See *Journal of Calendar Reform*, 1941, Page 14.

³ There are many instances, particularly preceding the war, where industries and laborers worked five days only and not six as commanded in the Bible.

⁴ The International Date-Line not only changes dates but incurs also the loss or gain of a day in the week.

Last, not least, the Moslem¹ peoples would not think of changing their weekly day of prayer, Friday, on account of any convention of the Western countries: The Indian Moslems² (almost 100 millions of active propagandistic tendencies) not more than those of the Near East and Africa.

Finally, in respect to the *practical* and political aspect of the problem, it may be sufficient to quote one example which clearly shows the difficulties of the introduction of extra days into life: the British administration in Palestine and India. The Government of Palestine has among the officials of its central and local departments Moslems and Jews as well as Christians (these being either Europeans or Arabs). The administrative work of the various departments is therefore distributed in order that the Moslems have their weekly holiday on Friday, the Jews on Saturday and the Christians on Sunday—an arrangement which is, naturally, achieved not without some difficulty. The relation between the Moslem and the Jewish days of rest, it is true, would not be affected by the proposed Reform, each of the two creeds preserving their custom of counting weekdays. On the other hand, the extra days would imply a change in the position of Sunday every year³ (in leap years even twice), and would compel the Government to change the whole organization of work annually, a process which is almost impracticable. A similar situation would arise in India where, besides the Hindu religions, Islam and Christianity play an important part.

It seems that these arguments, among others, have influenced the representatives of Great Britain at the League of Nations, many years ago, to adopt a negative attitude in respect to the Calendar Reform proposed⁴.

Let us summarize: There are all reasons *for* and none *against* a Reform, which gives precisely 13 weeks to every quarter (except the last, containing one or two supplementary days), in order that every quarter should begin with the same weekday; this would hold as well for the second and for the third month of every quarter.⁵ (The 365th day, as well as the addi-

¹ Mohammedan Turkey officially approved The World Calendar containing the one or two extra days, and Moslem Afghanistan for all international purposes. Fourteen countries have approved the civil World Calendar, among them eight Roman Catholic, two Protestant, one Eastern Orthodox, one Buddhist, and the two Mohammedan countries.

² Indian Hindu approval has been obtained through The Reverend Swami Omkar: "It is easy to see how happy this arrangement of The World Calendar is for all humanity—regardless of religion or race or nation. It is another step toward the universal brotherhood of man. The World Calendar has therefore my wholehearted approval and support." See *Journal of Calendar Reform*, 1939, Page 29.

³ See footnote 2, Page 126.

⁴ Great Britain's Answer, April 22, 1937: "The Government of the United Kingdom are of the opinion that any consideration of the draft Convention would be premature pending further discussion of the principle involved in the reform of the calendar and of the particular method of reform to be adopted. They consider that the time will not be ripe for any further examination of the matter by the League until propaganda by those in favor of the alteration of the calendar has achieved more widespread and solid results than it has hitherto. His Majesty's Government in the United Kingdom remain of the opinion that, until the fixation of Easter has been achieved internationally, no useful purpose is served by attempting to proceed with the larger question of calendar reform." No fixation of Easter can be had in our changeable calendar; the decision for a fixed Easter rests with the churches rather than with governments and secular groups. See *Journal of Calendar Reform*, 1937, Page 134.

⁵ At the League of Nations' Conference in 1931, the minutes show that the majority of opinions were for a perpetual calendar that included one or two extra days. See *Journal of Calendar Reform*, 1942, Pages 8 and 41.

tional day in leap years, could be inserted in December). Consequently, the whole year's calendar is defined in a simple and conspicuous way, if the weekday of the New Year is known.¹ Furthermore, if the Holy See and the other Churches agree to a relative stabilization of Easter, this could be fixed for the second Sunday of April, i. e., between the eighth and fourteenth of April. To postulate *more* than that, would mean *less*—it would mean the postponement of the Reform as a whole *ad calendæ graecas*, for chronological, religious and practical reasons!

OTHER JEWISH OPINIONS

DR. JULIAN MORGENSTERN, one of the most eminent American authorities on the Jewish calendar, and President of The Hebrew Union College of Cincinnati, from which a great majority of American rabbis have been graduated, wrote The World Calendar Association, February, 1942, giving his point of view, reprinted here with his permission.

"In principle, I am in sympathy with the project of The World Calendar Association, particularly if it is not at all the purpose of the Association to interfere unnecessarily in the religious calendars and ceremonial observances of various sects. I believe that it would be expedient for the Association to emphasize this fact over and over again. . . .

"With regard to the traditional Jewish religious calendar, the great difficulty in the way of correlating The World Calendar with it lies in the fact that The World Calendar would throw the traditional Jewish Sabbath out of place, in six years out of every cycle of seven years. I fear that this is an insurmountable obstacle for Orthodox Jews. I have given thought to the matter and see no way in which this obstacle can be surmounted. Otherwise, there is no difficulty whatever in the recognition and employment of The World Calendar by Jews for civil purposes.

"Of course, should our Government ever officially recognize the civil World Calendar, American Jews would accept this calendar readily and employ it for civil purposes. It would then become their responsibility to find a way to harmonize their traditional religious observances with the new and now official calendar.

"They have faced this problem before and found a solution." And I have no doubt that they could do it again if the need arises."

Other opinions are of value such as those of Rabbis Ephraim Frisch, Martin M. Weitz, Edgar Siskin, George Solomon and Dr. Abraham Cronbach.

"I rise to discuss the paragraph which has to do with the calendar changes. I am not an authority on the calendar, and have not studied the question of the effects the proposed changes in the calendar will have on the Sabbath. I am speaking with the greatest sympathy for our Orthodox brethren. I think there is entirely too much magnification of the importance of this issue. I think it misrepresents us to the world. If the world is going to be benefited by the change of the calendar as proposed, then we Jewish people of the Reform wing at least ought not to stand in the way.

"I am speaking with due reverence as to what a divinely ordained Sabbath means to me; it means that the human mind and human society thought out under Divine inspiration a day of rest. The mathematics and the calendar of it does not mean so much to me, and I do not think they mean much to my colleagues. As to the wanderingness of

¹ On this premise there could be no perpetual calendar.

² See *Journal of Calendar Reform*, 1932, Pages 111-114.

the Sabbath, it may have wandered before, for all I know; I think it did in the process of calendar changes. We are interested in a great institution and idea, and not in its geography or in its time location; and I do not think we would suffer any serious consequences if once a year the Sabbath was an Elijah—a wanderer.”—Rabbi Ephraim Frisch.

“The Sabbath evolved from an *irregular* and fourfold monthly experience to a *regular* weekly event. . . . If The World Calendar sanctifies the week additionally in that it can reintroduce an ancient Jewish practice—a 48 instead of 24 hour ‘coverage’ for major rest-days and festivals, it may well be time to lengthen again the one-day and one-week festivals by one day for each. Thus Passover would be celebrated by *all* for eight, not seven days, and New Year’s, for two, not one days. Orthodox Jewry celebrates eight and not seven days for Tabernacles and Passover, and two, not one, for New Year and Pentecost, in order that Jewry all over the world shall be able to celebrate these festivals simultaneously.”—Rabbi Martin M. Weitz.

“I am in favor of any kind of intelligent progressive calendar reform. The question of tradition doesn’t particularly trouble me, especially when balanced against the social benefit which might conceivably derive from some effective calendar reform.”—Rabbi Edgar Siskin.

“I am heartily in favor of calendar revision and see no reason why Liberal Rabbis (and, for that matter, Orthodox as well) should not approve. The calendar has undergone change from time to time, not always wisely. This proposal is considered and sensible and affects no principles.”—Rabbi George Solomon.

“I am with you in the matter of calendar alteration. . . . When you come right down to it, what the Orthodox Jew wants is not so much one day of rest in seven as a day of intervals with which the Deity will be satisfied. With increasing obliviousness to tradition Jews will eventually be prepared for calendar change.”—Dr. Abraham Cronbach.

Simplification

By ENOCH KARRER

SIMPLIFICATION of the calendar is a good idea. There is no reason why on petty grounds such as myth and worship of the Past, we discommode ourselves and make necessary continuous expenditure of nervous energy every day of our lives. Men have changed calendars before to suit their present needs and philosophies. Such changes have sometimes been in the direction of simplifications whose benefits we have inherited; sometimes not. We have the same rights, the same incentives, and equal abilities, to better our customs, habits, and social structures; yea, it is our duty to make them more fitted to our new world, not only for ourselves but for the sake of those to follow. Such mechanical things may seem insignificant and bothersome to make, but they have tremendous spiritual effects.

A new calendar for a new world is befitting the times.

To simplify our calendar may be a first step in taking hold of other things we have inherited, and that, although requiring change, we cannot change because we hold them in awe, or reverence, or by habit, or in fear. Some of these have kept us from fully and effectively arriving at and trying out the most ideal form of government; namely, a representative democracy. To mention a few: uniform price of things, a uniform price for a new world, a uniform system of measurement, a simplification of our monetary system, a simplification of language.

Would it not be a wonderful consummation to get a calendar reform a-going in or before 1945?

CALENDAR REFORM—AND WHY

By ELISABETH ACHELIS

President of The World Calendar Association

Address Before the Amateur Astronomers Association, November 4, 1942

LANCELOT HOGBEN, in his illuminating book, *Science for the Citizen*, devotes the entire first chapter to the coming of the calendar with these significant words in the opening sentence:

"... up to the present philosophers have only interpreted the world, it is also necessary to change it."

and further are these trenchant observations:

"The recognition of the passage of time now became a primary necessity of social life . . . man learned to measure things. He learned to keep account of past events. . . . The arts of writing, architecture, numbering, and in particular geometry, which was the offspring of star lore and shadow reckoning, were all by-products of man's first organized achievement, the construction of the calendar. . . .

"Science began when man started to plan ahead for the seasons, because planning ahead for the seasons demanded an organized body of continuous observations and a permanent record of their recurrence."

Here we are told clearly and directly that science began with the need for planning and recording the seasons in an organized manner for man's daily social and civil needs. This is a surprising statement, isn't it? How many of us associate the birth of science with the seasons—the calendar?

Now the calendar has always been based on three immutable laws of nature: the day with its inflexible alternating light and dark periods; the seasons, of which there are four in the temperate zones; and the year, which completes the annual circuit of the earth's journey around the sun.

Man's constant concern has ever been to keep the calendar in accord with these basic laws of nature, and were it not for two other elements that have entered into it, our time-system would be comparatively simple and natural. But the month and the week, which are outside of nature's laws, have complicated it. Not until today is the real problem of our calendar being solved, and this is the subject of my talk to you tonight.

The month, although it originated with the four phases of the moon, has been an independent time-unit for more than 60 centuries. Previous to this epochal change, the moon calendar of 354 days had been man's time-system practically throughout the entire world. There are people today who are still using this ancient calendar, hoary with age. It was only upon careful observation and study, through many hundreds of years, that man gradually became aware that the moon had no relation whatever to the seasons. With the ever increasing need for planning and producing more crops for the better nourishment of the people, the careful recording

of the varying seasons gained in importance. Moon calendars just did not come up to the mark. They became more and more difficult to reckon with, for the calculation of the moon calendars with the seasons called for constant adjustment. An additional month had to be inserted from time to time and this resulted in irregularities and difficulties. Lunar calendars are always complicated.

The ancient Egyptians, through their rulers and scientist-priests, solved the difficulty by discarding the moon altogether in their reckoning of time and accepted the sun as the governing force. They had recognized that the sun influenced the seasons, so they wisely built a solar calendar around it. The month period, however, was retained as a convenient intermediate time-unit between the short day and the longer season. The length of the months was changed from the previous alternating 29 and 30 days in the older lunar calendar to months of regular 30 days each with the necessary five days added at the end of every year. The Egyptian solar calendar had 365 days and it is this calendar that is the forefather of our present one. All future changes and improvements were based on this remarkable calendar that came from the land of the Pharaohs. To repeat, it was a 12-month solar calendar; each month had 30 days with the five so-called epagomenal days added at the end of every year, feast-days under the control of the priesthood.

As to the week, it is generally recognized that Egyptians as well as ancient Romans used weeks in their daily affairs, but the week did not receive the attention that was given to it by the Jews. To the Jew, primarily, belongs the credit of introducing the week of seven days with its one day of rest into the daily affairs of man, although he, too, ignored it in his calendar. The week, like the month, has no basis in nature or in science. It is an arbitrary period of time belonging solely to man's religious, social and mental concepts. And yet, the celestial firmament was influential in the naming of the seven weekdays.

The great problem that has always confronted man is to keep the calendar in harmony with the seasons and to reconcile the 365- and occasional 366-day year with the 52 series of seven-day weeks. They have plagued us through centuries, for these different units just do not fit. The 365-day year is not divisible into 52 seven-day weeks. It isn't divisible into anything in our time-system. The year is either too long by one day for the series of weeks, or these combined weeks are short one day to complete the year. Our problem is mathematical.

However, scientifically our calendar is a masterpiece. From its adoption in 1582, it will be accurate for some 3,300 years to come. Then it will be only one day off. Surely we needn't worry about this. You astronomers tell us the difference of that one day can be readily adjusted, by considering the last centurial leap year previous to that time a common year.

Our civilization owes much to the able astronomers and mathematicians of former years who, with their intense application and earnest studies, achieved the scientific status the calendar enjoys today. Sosigenes, Lilius and Clavius among many others deserve our humble tribute.

The Egyptians, as we have seen, gave us the solar year of 12 months, divided into all kinds of ways, 2, 3, 4, and 6. The Julian calendar, reformed by Julius Caesar, also introduced a solar calendar of 12 months but it inaugurated the leap-year rule. This leap-year rule was further amended by Julius Caesar's successor, Augustus. Both these reformers were made immortal through the two months, July and August, named after them.

In the fourth century, A.D., Constantine the Great, the first Christian Emperor of Western Europe, introduced the week of seven days into the calendar and his achievement, too, is immortalized. He selected Sunday for the day of rest and worship for Christians, commemorating for all time the first day of the week on which Christ arose and brought us the glorious message of the Resurrection. With the introduction of the week, however, the calendar lost its former stability. From then on it has changed every year, for no longer do the days and dates agree from year to year.

The latest reform, the Gregorian in 1582, made necessary as the calendar had lost step with the seasons once again, further amended the leap-year rule. The spring equinox came on March 11 in 1582, not on the ancient date of March 25. Pope Gregory XIII was faced with the incongruity that without an amendment to remove this discrepancy spring would be observed in the winter months, and winter in autumn, autumn in summer, and summer in spring, which would act adversely on feast-day observances. This had happened in the ancient past, as recorded in an interesting hieroglyphic document of 238 B.C. by an Egyptian Pharaoh, Ptolemy Euergetes, so it was realized that something drastic had to be done.

I believe you would like to hear this ancient decree. Freely translated, this prodigious draft of words reads:

"In order that it may happen that the matters decreed to be done at each season of the year may be done in accordance with the position which the heavens have with reference to the things which have to be performed at the present time (so that occasion may not be given and the case may not arise that some of the winter festivals should be observed in the summer, in consequence of the rising of the calendar star Sirius advancing one day every four years); and on the other hand, in order that some of the summer festivals shall not in the future come to be celebrated in the winter (a thing which has actually happened in the past and would happen again if the year always consisted of 360 days and five additional days, according to the current practice):

"It is commanded that from this time forward, one day—a festival of the good-doing gods—shall be added every four years, so that every man shall know that the small amount of time which was lacking in the arrangement of the seasons and of the year and in the rules which passed as laws for the knowledge of their movements, has been corrected, and that this correction has been supplied by the good-doing gods."

Unfortunately, this sensible decree was rejected by the priesthood and the people.

Pope Gregory established the spring equinox on March 21, which necessitated dropping ten days—Thursday, October 4, was followed by Friday, October 15. He chose March 21 for the spring equinox, not for a scientific but for a religious reason. A devout Christian and churchman, he wished to pay tribute to the first Christian gathering held in Europe—the famous Nicean Council of 325 A.D. In that year the spring equinox had fallen on March 21, the date we now observe in our present Gregorian calendar.

The problem of reconciling the different time-units of day, week, month and season into a steadfast, dependable calendar has, as we have seen, persistently eluded us. It is true our calendar is scientifically as correct and perfect as we could wish, but the arrangement of the calendar itself is most unsatisfactory.

Imagine, for instance, were our planets to wander around the solar system in as haphazard a manner as do the days, dates and weeks in our calendar, and were the planets to have 14 different circuits around which to swing in space at will, as our calendar wanders with its 14 different types of calendar and 28 different kinds of month—all hopping around in an aimless fashion. What would you do were Orion, Aldebaran, and Arcturus to appear at will on our heavenly dome without law and order? You see, the vagaries of our calendar are constantly playing tag with us and we are having a breathless and difficult time to catch up. Really, we never do catch up.

Astronomers, knowing these difficulties, have adopted for their own particular use an astronomical calendar consisting of *only* days. This Julian Day calendar begins with January 1, 4713 B.C., because in that year the three cycles—the 19-year Metonic Cycle, the 28-year Solar Cycle, and the 15-year Roman Indiction—all came together. Thus tonight, November 4, 1942, is your 2,430,668th Julian Day. Am I right in this? What would you think of an appointment made with you on such an astronomical date? You can hardly expect us average citizens to harness figures like these. It would be quite impossible, wouldn't it, to plan our daily tasks and engagements on the endlessly varying figures of the Julian Day system?

Our approved standard clock-time is patterned on 12 hours of 60 minutes, each of 60 seconds; the hour is equally divisible into 15-minute periods, further divided into units of five minutes. This regular clock-time, which tells us the day in an unfailing manner, has been further standardized into 24 orderly time-zones which encircle our globe. And radio programs are timed on a 24-hour system, as minutely as split seconds. No disorder, no confusion and no uncertainty here. It is a strange, inexplicable inconsistency of man that while he has perfected clock-time in so orderly

a manner, he has been so apathetic with his year-time, the calendar.

Today, we are counting our clock-time according to War-Time, to afford a greater amount of daylight for more work. Let us take a page out of your astronomical book and the book of the clock and follow these through to The World Calendar of 12 months and equal quarters. This World Calendar will not sabotage our valuable time—particularly now in our intensive effort toward winning the war and in the equally necessary planning for the winning of the peace. Both go hand in hand, both are urgent, and both demand planning and action for success.

As the calendar is now, nothing fits; but in The World Calendar of 12 months and equal quarters the various time-units are all coordinated. It matters little on what particular time-period your Amateur Astronomers Association, or a corporation, base their budget, since the day, the week, and the month all meet at the beginning and the end of every quarter-year.

This is accomplished by every quarter-year's having exactly 91 days, 13 weeks, or 3 months, beginning on a Sunday and ending on a Saturday. The three months of 31, 30, 30 days, repeated four times, possess a rhythmic order and a variety in their set-up that corresponds to nature's law and appeals to our human sensibilities. For no one wants to be regimented into an automaton, and neither does the calendar.

The quarter-year divisions vary, similarly as do the four seasons, but without the loss of law and order. Our universe and solar system are based on fundamental differences such as planets, stars, comets and galaxies. Yet they, too, all observe one common law of order. They all enjoy freedom under this law. Nature is always orderly. The World Calendar follows the same celestial pattern of law and order which begets harmony and peace in its arrangement and its usage. The past confusions, uncertainties and discords in our calendar-system have completely disappeared.

But you will say this gives us a year of 364 days only, is the 365th day to be discarded altogether? It would be unfortunate for the world and civilization were the 365th and the occasional 366th day to be lost from our reckoning of time, because it would lose its scientific and long sought-for accuracy. No indeed, these days are the new World Holidays placed on extra Saturdays: one, the Year-End Day, follows December 30 and becomes December W; and the other is the Leap-Year Day, following June 30, observed in leap years, and is the new June W. These World Holidays are the basis of any perpetual calendar, and every year conforms to the equinoxes and solstices. [See Page 123.]

These days steady the calendar, making it as dependable a timepiece as is our clock. They may be observed differently. To some, these world-days may provide jubilant rejoicing; to others, recreation; while to the religionist and humanitarian they will be dedicated to glorify the Creator, to encourage the brotherhood of man, and to further the spirit of good will—the goal of civilization.

Only one or two days within the months, from February 28 to September 1, call for change, the other six months remain as they are. But what

of the lost days—March 31, May 31 and August 31? Are people born on these days to have no birthday at all? Let me quote from a quaint document dated 1236 A.D., in which King Henry III of England decreed:

“The day increasing in the Leap Year shall be taken and reckoned in the same month wherein it groweth and that day, and the day next going before, shall be accounted for one day.”

So, should anyone here tonight have his birthday on March 31, it would be observed “on the day next going before,” March 30, without loss of his birth-month. It follows the same method as the leap-year birthday, February 29, which in common years is observed the day before, February 28, without changing the month. This is simple and logical.

With this new calendar in use, days and dates would always agree. For example, Labor Day holiday would always come not only on Monday but on September 4. This would greatly facilitate the planning of school schedules and vacation periods. Thanksgiving, established by Congress on the Fourth Thursday in November, would always be observed on the 23d. The previous see-sawing between the fourth and fifth Thursdays is eliminated and the recent confusion between the traditional and the President’s Thanksgiving forgotten.

Christmas, too, would always come on Monday, the 25th, affording a pleasantly long week-end for the preparing and celebrating of this glorious day without losing its familiar and cherished date.

Planning will be easier and more accurate under the new and better calendar. Businessmen and women, lawyers, government officials, scientists, educators, housewives, managers, laborers and the vast army of workers pressed into the present war emergency will use a really practical calendar. And for the peace, this improved time-plan with its agreeing days and dates, its equality and easy comparability will smooth away many a rough path. The present calendar, from a wanderer and a waster, will be transformed into The World Calendar which is steadfast and saving—salvaging our time, money and energy.

From all sides leaders are stressing global aspects. We are being taught to think in terms of global relationships. What could bring this home to us more vividly than a global calendar? Can you realize the influence this global calendar, The World Calendar, would have on the peoples of the earth? It opens untold possibilities for greater understanding and good will. A calendar upon which nations are united would encourage cooperation that has been too often lacking. The World Calendar would be a link serving the human family, uniting it in one common measurement of time.

Concerning the time of its adoption: this will be when a day and date of the present calendar coincide with the same day and date of the new. This will occur Saturday, December 30, 1944. The following day, December

31 in the old calendar, becomes the new World-Holiday-Saturday, December W, in the new. The World Calendar will then begin with Sunday, January 1, 1945. Another such favorable opportunity is 1950, but are we to allow our precious time to be wasted for five more years, especially when a new and better calendar is available and ready?

Together with being available and ready it has a wealth of support such as the endorsement of the 1922 report of Commission 32 of the International Astronomical Union, as well as in later years of the Committee for Maritime Meteorology, the American Association for the Advancement of Science and the Mathematical Association of America. In the business world the three notable British Chambers of Commerce, and the National Federation of Chambers and of Industry of Belgium have approved it, and in the United States it has the approval of the New York State Chamber of Commerce among others.

Labor has given it its strong support at a labor conference of the American States, held in Chile, 1936, and education through its National Education Association and the World Federation of Education Associations has also approved a world calendar of 12 months and equal quarters.

Among nations, 14 governments have officially approved it (Afghanistan, Brazil, Chile, China, Esthonia, Greece, Hungary, Mexico, Norway, Panama, Peru, Spain, Turkey and Uruguay). Our objective is to include the United States. To obtain the approval of the United States requires individual and group action to express to the President and his Administration the need for the new time-plan *now*. Such expression will result in action. The change justifies my opening quotation; it is not only necessary to interpret the world, it must also be changed.

Dr. Arthur M. Harding writes in his entertaining book, *Astronomy*:

"The study of astronomy gives a man a much broader and grander conception of his Creator, and his idea of that invisible hand, which is continually guiding the universe, changes as his knowledge increases."

The study of Time, the calendar, like the study of astronomy, gives man also a broader and grander conception of the Creator. For who created Time—that incessant motion where the present as soon as it is here becomes the past and the future the present? It belongs to our earth as inevitably as does the rain, the sun, and the air we breathe. Our idea of time changes as everything else changes with our ever increasing knowledge, and thus calendar change is inevitable.

The World Calendar looks to the vast universe and the solar system, taking these as its pattern, by bringing to its various separate time-parts the same rhythm and order, beauty and harmony, interrelationship and cooperation. Thus it parallels the law of the universe, and the celestial pattern will come closer to earth because it has found a counterpart in the new calendar of time—The World Calendar.

THE SOLDIER AND THE STREAMLINED FUTURE

By JOSEPH GUINEY

Chilton Company, Printing Division, New York and Philadelphia

ON one certain day in each month, the soldier receives his wages. Facetiously they remind each other that they now are paid big money—"fifty dollars a day" (one day each month). From this amount his insurance is deducted and an allowance for his dependents (if any), leaving him about half of the amount, and if he has been short of ready cash during the period since his last pay day, he has "jawboned" or borrowed on his credit, with the result that these advances must be paid back now. After he has settled up his accounts, he puts the remaining money in his money-belt or he tries to invest it in a "get-rich-quick" scheme which is usually a gambling proposition and is always very hard to beat. Regardless of the result, whether broke or with a little money in his possession, he eventually reaches one inescapable situation: he ruminates. Turning the situation over in his mind, he takes counsel with his buddies.

In a fairly good-sized barracks building, the men sleep in dormitory fashion, and become chummy with their neighbors. They are always aware that they all exist under the same supervision and are all in the same boat. They know very little of what is before them and would not even hazard a guess, but they hear a thousand rumors daily, few of which have any real foundation. They do their daily chores, although the routine varies slightly, and they like to discuss their problems with each other. Some nights find them pretty tired from the daily grind and on these occasions they are not particularly interested in conversation. However, there are times when a group of them can get together and exchange ideas.

It may be surprising to learn that a group of average soldiers present a fair cross-section of American life. There will be usually a farmer, a salesman, a storekeeper, a bookkeeper, a mechanic, a college man, a truck driver, a lawyer, a clerk, a musician, a technician, and a business man. In a representative dozen men, these types are often present with slight variations. Individually they may vary temperamentally—they may be sullen or smiling; caustic or kindly; irritable or friendly—these are only the outward expressions of the inward feelings of men on a mission, men who are risking their lives for a pittance, to keep America free!

Sitting around in a group, on their bunks or wherever they may chance to be, the conversation starts out pretty much in the same well-worn strain: "If I were home tonight." It is the same old song played on the strings of the soldier's heart, and it is the nearest thing to him at the moment

because it brings back misty memories of a time when there was no thought of war, nor of khaki uniforms, and when pay-days came once a week, not once a month. Casual questions are often asked under such circumstances, but never personal ones, for the curtain of private life is not to be lifted here, but there are always some questions that are often repeated, because the answers are not always so certain. The first question is in the current tempo: "Where do we go next, and what happens then?" This is natural because of the desire to know what lies immediately before him—travel, combat, life or death? Since he has no command over his movements, he cannot help but wonder what the fates have in store for him.

The second question is even more pertinent: "After the war, what of us, in the new streamlined world?" Each of the men will have his own particular idea, but he may be only expressing his hopes, and not his convictions. In these circumstances, among such a group, there will be wide and varied discussion on the topic of what the world will hold for each one of them. Men will instinctively listen to that speaker whose knowledge of the subject shows that he has thought long and hard of these days to come. Oration does not count here, nor gestures; loud voices and dominating influence are of no value, but fighting men will always listen to the quiet, earnest, soft-spoken thinker who has turned over these thoughts many times in his mind, and who marshals his facts so definitely and presents them so clearly that all of these various types of men recognize the truth in all its honesty. They realize the simplicity of streamlined possibility because, now, for the first time, their minds are not confused with things relatively unimportant when viewed in the cold light of today and tomorrow.

One of these men will have earned the faith and belief of his comrades. It may be any one of them, but it will be the one who thinks not only of himself but for his fellow-man and who has earned their respect by the simplicity and unswerving truth of his observations. He is the straight-line thinker and he speaks:

THE THINKER: Certainly the future is going to be streamlined, and we will have to be streamlined, too, to meet this situation. We had a war 25 years ago and we've got a new one now and the planes that were so successful then are just suicide crates today. In the old days, the pilots just went up and fought dog-fights and spotted troop movements and strafed the trenches. They had flimsy planes and some of the bravest fighting pilots had little or no protection against the opposition and were lost at the time when they were needed most. Today planes fly with protective armor, fire cannons, drop bombs on railway centers, take off from ships by catapulting, and even carry tanks in cargo planes. They are called "flying fortresses" and are exactly that. They can drop scores of

paratroops, fully equipped, behind the enemy lines, and nations have been conquered by these tactics. War has progressed a long way since David selected the three round stones from the brook, and since the short Roman sword conquered Britain. We may think it's pretty good right now, but the future will be streamlined still further. And here's a surprise for you: even TIME will be streamlined, and it will affect each and every one of you! It will affect your earning capacity and your income!

THE SOLDIER-SALESMAN: What do you mean by TIME being streamlined and how can it affect a salesman's income?

THE THINKER: Let me explain. I don't suppose you ever had to wait 30 days for a pay check before you went into the Army. You were probably paid once a week. You might have been paid on Friday and if the last pay-day in the month came on Friday, the 26th, most of your money for the rent would be gone by the first of the month. If you had your way, you would like to be paid the day before rent-day, if possible. Did you know that there is a World Calendar Plan that has been accepted by 14 nations, that will stabilize the entire yearly calendar and which will simplify the task of everybody? It simply provides that the first month in each quarter shall have 31 days, and that the other two months in each quarter have 30 days each. This places exactly 91 days in each quarter which means 13 even weeks of 7 days each. Each quarter starts on Sunday and ends on Saturday, and four quarters of 91 days each equal 364 days. The extra day is placed at the end of the year after December 30, and is called Year-End Day, a World Holiday, an extra Saturday. In leap year, another extra day is placed after June 30, and called Leap-Year Day, also an extra Saturday and a World Holiday. Therefore, when a salesman plans his calls, he can arrange his tour so that there are no layovers due to holidays popping up in the middle of the week. There will be the same correct number of weekdays in each quarter and therefore there will be a more exact means of comparing results by quarterly periods. He can arrange a schedule that will be fairly permanent, to call on clients on the same day on each tour around the circuit, to avoid the possibility of catching the client when he is otherwise engaged to the salesman's disadvantage. He will be able to anticipate orders he might reasonably expect and be able to so perfect his calling schedule that he will be able to increase his sales and income.

THE SOLDIER-FARMER: How will it affect me?

THE THINKER: Of course you know the great improvement in agricultural methods in the last few years. Many leading universities are teaching scientific farming as a major opportunity for college men. Agriculture is one of the largest and most important industries in the United States, but for many years it did not attract new blood. Men were farmers because it was their heritage; their fathers had been farmers before them,

or they had a farm on their hands, and a living must be wrested from the soil. The various agricultural bureaus of the Government have set up budget standards to enable the farmer to study his problem intelligently from a financial profit-and-loss basis. With an evenly balanced calendar, a more perfect arrangement is possible. Statistics can be arrayed for comparing even phases of time. War demands have reduced the help formerly available to the farmers; the plows are left standing in the furrows, as the finger of glory beckons, summoning the boy from the dull brown earth to the brighter fields afar, calling with the deep insistent voice that surges in his breast until he leaves for those other fields where men struggle and die. Therefore, the new method of time calculation will assist the farmer to solve troublesome problems of breeding, feed-crop maturity, crop rotation, and market conditions. Government control of agriculture, its production and its distribution can gain much indeed from this new plan.

THE SOLDIER-MECHANIC: How is the new Calendar Plan going to help me?

THE THINKER: All good mechanics are interested in labor organizations. They are the basis and the means by which labor has been able to speak with a single unified voice, a voice that has told the world of the power of labor, not only in its accomplishments, but in the solidarity of the labor movement. Through its chosen chiefs, labor has stoutly maintained its position at the arbitration table and has fought steadfastly for its inherent rights—the right to live in reasonable comfort, to work under fair conditions, the right of collective bargaining, and the right to earn a living wage not only to sustain their families, but also to provide a margin of safety. In 1936, the International Labor Organization met in Geneva, and went on record to declare the present calendar unsound and unsatisfactory from economic standpoints. This simply means that unevenly balanced holidays, long months and short months, work a hardship on the wage-earner by the interruption of his earning capacity—as seasonal changes or slack periods in labor are usually non-productive as far as wages and income are concerned, while rents and living costs are unavoidable, steady fixed expenses. Labor moves forward steadily, constantly adapting its advance to the changing times. Time itself is the very essence of labor. Skilled workers, now engaged in speeding up essential war industries, are well aware of how relentlessly the clock steadily ticks off the seconds, minutes and hours of every day, while the whole operating force of the assembly plant is hustling to complete the entire product so that another fighting tank or plane can take its place in the battle-line. Labor can avail itself of this opportunity to put Time to work in behalf of Labor, and to the advantage of Labor.

THE SOLDIER-RETAILER: How could retailing be affected by The World Calendar Plan?

THE THINKER: There are many ways that retailing can be helped tremendously, but we will have time for only one outstanding example. Outside of Christmas as the end of the year peak for sales, the next outstanding date is Easter in most retail minds. Easter Sunday may fall anywhere from March 22 to April 25. Now here is a stretch of 35 days and yet styles and clothing materials are expected to be in harmony with the weather, which may vary from frigid winter to a warm spring day. For example, Easter Sunday falls:

In 1937.....	March 28	In 1941.....	April 13
1938.....	April 17	1942.....	April 5
1939.....	April 9	1943.....	April 25
1940.....	March 24	1944.....	April 9

How can a business be operated to its fullest perfection if the peak point of sales hops around from the first quarter into the second quarter, off and on, without any stabilization? Students of The World Calendar Plan have suggested April 8 as a fixed date for Easter Sunday, with Ash Wednesday and other Lenten dates in their permanent relative positions. However, The World Calendar Association does not attempt to do more than suggest April 8, because the celebration of Easter Sunday is primarily a religious matter, and should be left entirely in the hands of Church authorities whose wishes must be respected. From a straight business viewpoint, the advantage in stabilizing a period that has such a bearing on selling, merchandising and concentration of manufacturing effort would be tremendous. By intelligently scheduling production during the period of time from January 1 to April 8 in this more scientific manner, the combined efforts of the entire wholesale and retail merchandising and marketing program would be evenly and properly spaced. This would permit much better production, easier distribution into sales outlets and a firmer selling effort designed to display and to sell the goods with less sales resistance by virtue of a more stabilized program.

THE SOLDIER-LAWYER: How could you show that the legal profession would benefit?

THE THINKER: You will readily appreciate the inestimable value of knowing the exact corresponding date for each weekday in the quarter-year. January 1, April 1, July 1, and October 1—all these will always fall on Sunday. February 1, May 1, August 1, and November 1 will always be on Wednesday, and March 1, June 1, September 1, and December 1 will definitely be on Friday. Any fixed date such as a birthday or a holiday will always be on the same weekday every year without variation. For the first time, the legal term “half-year” will mean 182 days, not 181 or 184, as is the case now. A “quarter-year” will mean 91 days, not 90, 91 or 92 days. Thus a perfectly arranged order would eliminate legal tangles and the resulting simplicity assist in many complicated problems.

In autumn, certain State Supreme Courts, as well as the United States Supreme Court, reopen after summer vacations. It would be much more definite for the clerk's posted announcement to read: Monday, September 4, or Monday, October 2, than the first Monday in September or the first Monday in October. A legal date may often fall upon a holiday which may make it necessary to defer the meeting until the following day. A holiday that may fall on Sunday in the present calendar must be celebrated on Monday with consequent legal difficulties. Many lawyers find it necessary to keep a calendar "live-file" for the benefit of their clients, listing pertinent information regarding specific dates and court calendar dates. All conflicting dates can be orderly computed if governed by a sensibly permanent arrangement of dates as prescribed in *The World Calendar*, since orderly procedure and accuracy are part of the legal training and background of every lawyer.

THE SOLDIER-COLLEGE MAN: I can begin to understand this, and it amazes me.

THE THINKER: The more you think of it, the more amazing it becomes, and yet, withal, it is simple and secure. The National Education Association and the World Federation of Education Associations have given their whole-hearted endorsement to this simplified plan. As a student in school and in college and finally as a teacher and educator, you must be familiar with the usual routine that brings youth back to school after Labor Day. With such a date varying from September 1 to September 7, the time that remains before Christmas is bound to vary. However, within that time, a teaching schedule is supposed to function on a steady day-to-day basis. Teachers and pupils both suffer because of the irregularity of the schedule; either they can take it easy or they have to hustle with poor results as a certain aftermath. The division of the school or college year into two terms was not easy. But the necessity under the spur of war conditions now makes it imperative to practically eliminate vacations, resulting in three semesters of 15 weeks each. In a heavy mathematical course like engineering, the increase in pressure on the student is terrific. Several universities today have Army or Navy Reserve Officers Training Corps. In such schools, at least ten hours extra a week must be given to military or naval subjects which are tough to master. When drilling and marching are added, the student is pretty thoroughly exhausted. This is a terrific contrast to the old-line easy-going educational routine of college life.

Under such circumstances, you can readily appreciate the tremendous value to the student of a properly balanced calendar that will cooperate by permitting an intelligently balanced school schedule that will enable young developing minds to be trained along sensible, definite pathways and not under an unbalanced, haphazard, inefficient calendar.

In addition, the many outstanding dates of college life, such as Class Day, Commencement Day, Alumni Day, Junior Day and days of special sport importance from the competitive angle, can be permanently established. The committee work can start on clearly defined dates and all the supporters, parents and alumni of the educational institution will know far in advance of the correct dates and thereby avoid conflicting engagements. In this way, because of the new World Calendar, education will be far more powerful and efficient for the students of the future.

THE SOLDIER-CLERK: Professor, I worked in a bank before becoming a soldier. How could The World Calendar be of assistance to the banks?

THE THINKER: To be perfectly frank, the banking industry can gain more perhaps than any other single business or occupational field. Banks exist because people deposit money which the bank lends out, usually on suitable collateral. Because the percentage of interest paid out is less than that collected, the bank can be profitably operated. The present basis of figuring interest by a quarterly basis is a very uneven attempt to balance accounts. This is due to the fact that there are a varying number of days in each quarter and because there are 184 days in the second half-year of the present calendar.

Many banks, and more especially the ones that now handle Home Owner's Loan Corporation Mortgages, make all the disbursements on the mortgaged property. Under the terms of this Government-controlled agency, the owner-tenant pays a flat stipulated sum per month to the bank. In this amount are included a sum that will amortize or completely pay for the property in a period of either fifteen or twenty years. The rest of the money is for taxes, interest, etc. Outside of large cities, these taxes must be paid to a School District; to a Town or County Receiver of Taxes, to the Village Clerk, etc. Such items are due and payable or a tax lien is placed against the property. The bank will benefit by having exactly certain month-date days which will be exactly the same for each payment.

It is now possible with equalized quarters and half-years to pay State and Federal income taxes quarterly and such other payments as dividends, loans, installments and insurance premiums that can be reckoned in much smoother fashion on this new basis. Not only the business accounts of the bank's customers, but even the bank's own statements of operation can be more properly compared and with greater satisfaction and efficiency under The World Calendar Plan.

THE SOLDIER-TRUCK DRIVER: Well, "Mr. Einstein," you certainly have it all figured out very nicely. When is all this going to happen?

THE THINKER: If all thinking people will concentrate their efforts, it will begin by January 1, 1945. The preceding day will end the year 1944 on a double Saturday, the new world holiday (December 31 of the old calendar) and the transition will be quite natural. It will be just as easy,

in fact easier, than daylight saving, and in these turbulent days it will be a great time-saving factor in all industry which is now speeded up in high gear for one supreme purpose—the winning of the war.

THE SOLDIER-LAWYER: Congratulations on a perfect presentation of an excellent case, well prepared and honestly placed before the jury. What's the verdict, jurymen?

THE SOLDIERS ALL: THREE CHEERS for our own "Mr. Einstein"! HIP, HIP, HURRAH!

THE TOP SERGEANT (attracted by the shouting): Pipe down, you fellows! You sound like a bunch of schoolboys!

ONE SOLDIER (thoughtfully): This is the first time I ever agreed with the Top Sergeant, but we're not schoolboys any longer, at least as far as streamlining the calendar is concerned. That World Calendar Plan could go a long way in helping to win the war, at that!

Thanksgiving

In Newport (Rhode Island) *Herald*, November 26, 1942

TODAY is Thanksgiving, the day upon which we are all supposed to pause to give thanks for all the things we have received during the past year.

We are all stopping to give thanks, for there are many things that we here at home have to be thankful for in this year of war and world trouble. Many things have happened since last Thanksgiving. Today we give our thanks for all the blessings that have been ours and at the same time we are glad to go without some things on our tables today, that the men in the armed forces on every front in this global war might have plenty to eat. We are thankful too for the turn that the war news has taken. Here is hoping that before long the clouds will break and there will be an everlasting peace declared over this globe, a peace that will remain for all time, a peace upon which our children and grandchildren can look up to and say that those who gave their lives in the struggle did not die in vain.

When such a peace comes it certainly will be something to really be thankful for on Thanksgiving Days to come.

It was during the Civil War, 1863 and 1864, that Abraham Lincoln established Thanksgiving through Presidential proclamation to be celebrated nationally on the last Thursday in November. It so happened that in both those years the last Thursday was also the fourth Thursday. In succeeding years, however, Thanksgiving wandered. It might be on either the fourth or fifth Thursday of November.

Another war President, Franklin D. Roosevelt, signed the act of Congress stabilizing Thanksgiving on the fourth Thursday of November. It is worth noting, too, that this act received Presidential approval on December 26, 1941, nearly three weeks after Pearl Harbor.

Miss Elisabeth Achelis, President of The World Calendar Association, pointed out that here is real cause for rejoicing this Thanksgiving on the fourth Thursday in November because America has become reunited in the observance of this truly American day.

CURRENT PRESS COMMENT

Lions Club Endorsement

West Chester (Pa.) Daily Local News

At its meeting in the Mansion House at the noon hour yesterday [December 2, 1942], the West Chester Lions Club by resolution endorsed the New World Calendar, which had been presented by Miss Elisabeth Achelis two weeks ago, and asked that it also be endorsed by the State and International associations of Lions.

The resolutions, presented by Dr. Henry Pleasants, endorsed the calendar as a practical measure, without the defects of the present Gregorian calendar, and urged its adoption, to be put into effect January 1, 1945. It already has been endorsed by 14 nations.

Campaign Continued

Ottawa (Canada) Evening Journal

The World Calendar Association, with headquarters in New York, in war as in peace carries on its campaign for a fixed and unchanging year, 12 months divided into uniform quarters. Undoubtedly the scheme has merit, especially from the standpoint of business records.

In War as in Peace

St. Paul (Minn.) Dispatch

Advocates of calendar reform are determined that not even a World War shall divert attention from their pet cause. As a matter of fact, they do put up a pretty substantial argument that use of the lop-sided Gregorian calendar costs even more in lost motion and inconvenience during a war than in time of peace.

Their persistence, even if it be purely opportunistic, may produce results now. The other World War brought daylight-saving time in urban areas, and this one has already expanded it into universal war time on a year-round basis. War and the post-war adjustment will see many other revolutionary changes, reason the calendar reformers, so why not include this one?

Streamlining the Calendar

Philadelphia Inquirer

Now time is due to be streamlined. If The World Calendar Association has its way, we will adopt a new method of telling off the days of our years. We can forget the helpful little poem about "Thirty days hath September" because each month will have exactly 26 days plus Sundays.

The first month of each quarter will be 31 days long, the other two 30 days, total 364 days. Between December 30 and January 1 will fall the odd day, Year-End Day. It will be an international holiday; so will Leap-Year Day which will be moved along to follow June 30. The system, if approved, is set to begin on January 1, 1945, which will fall on Sunday. Every New Year thereafter will coincide with the first day of the week.

Elisabeth Achelis, President of The World Calendar Association and its sponsor in America, declares that the new system would bring about slight but greatly beneficial changes. "Far from disturbing calculations of individuals or nations, it would facilitate them," she says. "Its process is to simplify and ease our way to achievement in work, education, world democracy."

Business, industry and labor would be perhaps the greatest beneficiaries of The World Calendar as Miss Achelis sees it. She points out that an equal spacing of months into four quarters which measure identically would promote coordination, simplify computation of wages and salaries, ease the strain of tax payments, even of corporation financing. She believes the system would make life easier for the housewife who finds, under the present calendar, that the weekly pay check seldom arrives simultaneously with monthly bills.

"To adopt the new calendar," she says, "it would be highly desirable to have the general consent of all nations. But calendar history has shown us that this is not essential. The Gregorian calendar, under which we function now, is less than 200 years old in English speaking countries. In some other countries it has been in effect short of 20 years."

EXCERPTS AND REVIEWS

The Yearly Calendar

In Aden *Fatat-ul-Jezirah* (The Island's Girl)
(Translated from the Arabic by The Berlitz
School)

SINCE the dawn of civilization man has been striving to interpret successive events in order to bring himself to an understanding of all that happened from earliest time. He observed that the crescent appears every 29 or 30 days. The Romans celebrated the rise of the crescent as a public holiday and on that day the high priest announced all the feast-days of the ensuing month.

As from earliest time it had been noted that the moon appeared above the western horizon once every $29\frac{1}{2}$ days, the people agreed to divide the year into 12 months. This figure seems to have been very convenient, for the day was divided into 12 hours and the night also into 12 hours. But 12 months of $29\frac{1}{2}$ days each would give a year of 354 days only, or 11 days and a fraction of a day less than the solar year or the four seasons. This would mean a difference of 34 days every three years. For this reason it was agreed in ancient times that certain years should have 13 months. These lengthened years, or solar moon-years, were adopted in the year 2000 B. C. by the Babylonians and the Assyrians. The Jews followed their example and still retain this form of calendar. They observe their Old Testament holidays in accordance with this calendar and these dates from year to year differ, therefore, from corresponding dates in the Gregorian calendar.

The Jewish New Year (*Rosh Hashana*) came on the 3d of October in 1940; in the following year of 1941 it came on September 22; in this year of 1942 it will come on September 12.

The Moslems still observe the moon months (*Camar* months) and a year (*Hegriyah*) of 12 months or 354 days; and the first day of the month of Moharram may occur on any day of the solar year. In the year of 1931 it occurred on May 18; in 1920 it occurred on September 15.

It seems that the ancient Egyptians be-

gan in the year 2780 B. C.* to use the solar year which they divided into 12 months, each of which was 30 days. They devoted the extra five days at the end of the year to religious festivities. The sequel of this was that the earth was divided into 360 degrees. Though the globe was not considered completely circular, it seemed logical that it should make a complete turn every year and it was estimated that it traveled one degree every day. This notion was ascribed to the Babylonians in the year 2000 B. C., and was accepted by the Greeks and the pupils of Euclid.

The ancients considered that time should be divided into weeks of seven days for astronomical reasons, for the moon appeared to change its shape every seven days, though there were some who believed that the change in shape occurred every five days.

Those who believed that the face of the moon changes every seven days termed the first period of seven days as the period of the crescent, the second seven days as the first quarter, the third seven days as the full moon, and the last seven days as the last quarter of the moon. It might be that they made this division because of their belief that the planets including the sun and the moon were seven in number. It may be strange for a modern student to find out that his forefathers believed the sun and the moon were planets when they are not so. Astronomical scientists, moreover, have discovered by telescope that Uranus, Neptune and Pluto are planets—the last two are not visible to the naked eye, while sharp eyes only can see Uranus.

The Romans did not divide their week into seven days until the Emperor Constantine in the year 321 A. D. adopted a week of seven days as a base and named Sunday as a religious day for prayers.

The names of the months have a significant history. The year used to start with March (the God of War) and ended with December which was the tenth month, and the year used to be ten months in the

* EDITOR'S NOTE: We accept the date 4236 B.C. as the year in which the Egyptian solar calendar originated, according to the late Dr. James H. Breasted.

European countries, because the intervening two months were cold and dark and work was suspended in northern Europe during this period. Though the weather on the shores of the Mediterranean Sea was temperate, they followed this basis to satisfy the northern part of Europe.

In the 7th century before Christ at the time of Numa Pompilius they added to these ten months the month of *Januarius* or January (the name of the guard of heaven) and the month of *Februarius* (February).

This unsettled condition continued for many centuries until the time of Julius Caesar who in the year 46 B. C. revised the calendar. Pope Gregory XIII in 1582 further revised the calendar by adjusting the leap-year rule.

There is now need for a still further revision of the calendar.

- (1) The dates of every month do not correspond with the days of the week; for example, the Fourth of July falls on different days from year to year—it came on Tuesday in 1939 and on Saturday in 1942.
- (2) The months differ in number of days from 28 to 31, and for this reason every three months or quarter of a year may vary in number of days from 90 to 92.

The World Calendar Association decided to correct these defects and sponsors a calendar that contains four equal quarters of 91 days each, with months containing 31, 30 and 30 days. Every quarter starts with Sunday, the second month of each quarter starting with Wednesday, and the third month with Friday. The year will have 364 days with an extra day added each year at the end of December (this day usually to be made an international holiday), and in leap years there will be another extra day, at the end of June.

Endorsement of The World Calendar

By SHANE MACCARTHY

Division of Central Administrative Services
Office for Emergency Management

I HAVE read with interest and with regret the article on stabilizing our calendar, appearing in the current issue of the *Department Store Economist*. This paradoxical sentence needs explanation.

I have not only a keen "interest" in your movement to adopt a balanced and regular World Calendar but, furthermore, I enthusiastically and wholeheartedly endorse your efforts since I am convinced that business management, both in private industry and in the Federal Government, could be run more efficiently and economically if the World Calendar were adopted. Present budgetary controls, for example, whether on a monthly basis or a quarterly basis, are never exactly comparable and constantly demand adjustments and readjustments.

I use the word "regret" because I am disappointed that so few people, comparatively speaking, are aware of your efforts. I presume that you have a planned program in mind so that all people will have a complete understanding of your efforts with a view toward adopting the World Calendar by January 1, 1945. If widespread publicity on this subject is given to everyone, whether through national newspaper notification or otherwise, and if your program is fully explained to leading statesmen in Federal and State Government, to business men in Government and in industry, and to professors and teachers at colleges, universities and high schools, I cannot think of one cogent reason why your efforts should not be crowned with success.

Acrostic

By HENRY M. LEVENE

Secretary, Rotary Club of Chelsea, Mass.

FOR the 13 letters in World Calendar and the 13 weeks in every quarter there are 13 attributes listed here:

Wholesome
Original
Regular
Laudable
Dependable
Constructive
Accurate
Logical
Enlightening
Necessary
Desirable
Admirable
Resplendent

Hope I'm alive in 1945 and see it in operation!

FROM THE MAIL BAG

In the name of His Excellency, the President of the Republic, I give you the most expressive thanks for the new calendar of 12 months, revised and reformed, and for whose acceptance The World Calendar Association is working. . . . In addition, the President presents to you and to each one of the members of the Association his wishes for the success of the interesting and important work in which you are dedicated.—Agustín Ferrari, Secretary General of the Presidency, Republic of Panama.

Your suggestion to work for a calendar for the year beginning January 1, 1945, sounds to me like a good one and I hope you succeed.—Frederic A. Delano, Chairman, National Resources Planning Board, Washington, D. C.

Assuming that there will be a new world situation within the next year or two, what more opportune moment could one desire for inaugurating The World Calendar? It is not too early to bend energies in this direction to bring this about by 1945.—Harlan T. Stetson, Mass. Inst. of Tech.

If you have a publication on the exhibit, I would be pleased to know about it. The subject happens to be of special interest to me.—Dr. Isaiah Bowman, President, Johns Hopkins University, Baltimore, Md.

I read the material you so kindly sent along about a standard calendar and it makes plenty of sense to me.—Stuart Chase, Georgetown, Conn.

I am entirely in agreement with you about the importance of the change in the calendar. Since we are witnessing an unfoldment of a new era and changes are on every hand, it is obviously the time to improve our calendar.—Mrs. Clark Stearns, President International, The Pan American League, Miami, Fla.

For years I have been deeply interested in calendar reform, and read your magazine with greatest interest. Keep up the good work and let us start January 1, 1945. Should be glad to see a general movement.—Wm. A. Blair, Chairman, State Board of Public Welfare, Winston Salem, N. C.

If this present civilization is to be worth its name we must cast aside all out-moded institutions as evolution brings forth more worth-while ones. Eventually, your World Calendar must and will come to be, for it appears the perfect answer to a now perplexing problem which in some way affects the daily lives of all of us. In our present all-out war effort we must not lose sight of the fact that there are many worthy causes such as yours which can be great contributions toward "making this a better world in which to live."—Edward M. K. Murray, Williamstown, Mass.

I was much interested in this material and appreciate your courtesy in sending it. Your calendar plan has much to commend it and I hope that it can be brought to the attention of the responsible officials of every nation.—Ernest R. Bryan, Chief, Division of Information and Publications, The National Archives, Washington, D. C.

I thank you for your little calendar—Unbalanced and Balanced. I believe in all your ideas about the calendar and I have no doubt you are making converts all the time.—Carrie Chapman Catt, New Rochelle, N. Y.

I have felt for a long time that the present calendar is a pretty awkward instrument for time reckoning, but the exact manner in which it should be changed is something I am willing to leave to the experts.—Major General Philip B. Fleming, U. S. A., Administrator, Federal Works Agency, Washington, D. C.

I have just received "A New Calendar for a New World" with the greatest profit and pleasure. I do hope that our efforts will be crowned with success by 1945, and I hope that the situation of the world will have calmed down long before then, so that the President of the United States may be able to call an International Conference.—Lord Desborough, Hertford, England.

Calendar reform should have the support of every intelligent person—it is as necessary as the decimal system.—Guenter Schwartz, Physicist, Johns Hopkins University, Baltimore.

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Journal of
CALENDAR
REFORM

FIRST QUARTER

1942

1942

PRESENT GREGORIAN CALENDAR

FIRST QUARTER								THIRD QUARTER										
	S	M	T	W	T	F	S		S	M	T	W	T	F	S			
JAN					1	2	3	JUL					1	2	3	4		
	4	5	6	7	8	9	10		5	6	7	8	9	10	11			
	11	12	13	14	15	16	17		12	13	14	15	16	17	18			
	18	19	20	21	22	23	24		19	20	21	22	23	24	25			
	25	26	27	28	29	30	31		26	27	28	29	30	31				
FEB								AUG								1		
	1	2	3	4	5	6	7		2	3	4	5	6	7	8			
	8	9	10	11	12	13	14		9	10	11	12	13	14	15			
	15	16	17	18	19	20	21		16	17	18	19	20	21	22			
	22	23	24	25	26	27	28		23	24	25	26	27	28	29			
									30	31								
MAR								SEP								1		
	1	2	3	4	5	6	7		1	2	3	4	5					
	8	9	10	11	12	13	14		6	7	8	9	10	11	12			
	15	16	17	18	19	20	21		13	14	15	16	17	18	19			
	22	23	24	25	26	27	28		20	21	22	23	24	25	26			
	29	30	31						27	28	29	30						
90 days								92 days										
SECOND QUARTER								FOURTH QUARTER										
	S	M	T	W	T	F	S		S	M	T	W	T	F	S			
APR								OCT								1		
	5	6	7	8	9	10	11		4	5	6	7	8	9	10			
	12	13	14	15	16	17	18		11	12	13	14	15	16	17			
	19	20	21	22	23	24	25		18	19	20	21	22	23	24			
	26	27	28	29	30				25	26	27	28	29	30	31			
MAY								NOV								1		
	3	4	5	6	7	8	9		1	2	3	4	5	6	7			
	10	11	12	13	14	15	16		8	9	10	11	12	13	14			
	17	18	19	20	21	22	23		15	16	17	18	19	20	21			
	24	25	26	27	28	29	30		22	23	24	25	26	27	28			
	31								29	30								
JUN								DEC								1		
	1	2	3	4	5	6			1	2	3	4	5					
	7	8	9	10	11	12	13		6	7	8	9	10	11	12			
	14	15	16	17	18	19	20		13	14	15	16	17	18	19			
	21	22	23	24	25	26	27		20	21	22	23	24	25	26			
	28	29	30						27	28	29	30	31					
91 days								92 days										

This calendar has 52 weeks and must borrow from another week to complete the year. This causes the calendar to change every year and is responsible for its confusion. Also note varying number of days in each quarter.

EACH YEAR DIFFERENT

This calendar is always different from year to year.

The quarters are unequal in length. In leap years the first half-year has 182 days; the second, 184 days.

Each quarter begins and ends on a different day of the week.

Each month begins and ends on a different weekday.

The months have a varying number of weekdays.

Each year begins on a different weekday.

This calendar is unbalanced in structure, unstable in form, and irregular in arrangement.

SOON YOU WILL BE DISCARDING THIS OBSOLETE CALENDAR.

PROPOSED WORLD CALENDAR

FIRST QUARTER							THIRD QUARTER									
	S	M	T	W	T	F	S		S	M	T	W	T	F	S	
JAN	1	2	3	4	5	6	7	JUL	1	2	3	4	5	6	7	
	8	9	10	11	12	13	14		8	9	10	11	12	13	14	
	15	16	17	18	19	20	21		15	16	17	18	19	20	21	
	22	23	24	25	26	27	28		22	23	24	25	26	27	28	
	29	30	31						29	30	31					
FEB								AUG								
	5	6	7	8	9	10	11		5	6	7	8	9	10	11	
	12	13	14	15	16	17	18		12	13	14	15	16	17	18	
	19	20	21	22	23	24	25		19	20	21	22	23	24	25	
	26	27	28	29	30				26	27	28	29	30			
MAR								SEP								
	3	4	5	6	7	8	9		3	4	5	6	7	8	9	
	10	11	12	13	14	15	16		10	11	12	13	14	15	16	
	17	18	19	20	21	22	23		17	18	19	20	21	22	23	
	24	25	26	27	28	29	30		24	25	26	27	28	29	30	
91 days							91 days									
SECOND QUARTER							FOURTH QUARTER									
	S	M	T	W	T	F	S		S	M	T	W	T	F	S	
APR	1	2	3	4	5	6	7	OCT	1	2	3	4	5	6	7	
	8	9	10	11	12	13	14		8	9	10	11	12	13	14	
	15	16	17	18	19	20	21		15	16	17	18	19	20	21	
	22	23	24	25	26	27	28		22	23	24	25	26	27	28	
	29	30	31						29	30	31					
MAY								NOV								
	5	6	7	8	9	10	11		5	6	7	8	9	10	11	
	12	13	14	15	16	17	18		12	13	14	15	16	17	18	
	19	20	21	22	23	24	25		19	20	21	22	23	24	25	
	26	27	28	29	30				26	27	28	29	30			
JUN								DEC								
	2	3	4	5	6	7	8		3	4	5	6	7	8	9	
	9	10	11	12	13	14	15		10	11	12	13	14	15	16	
	16	17	18	19	20	21	22		17	18	19	20	21	22	23	
	23	24	25	26	27	28	29		24	25	26	27	28	29	30	
91 days							91 days									

*YEAR-END DAY, December 31 or Y, an extra Saturday (a WORLD HOLIDAY), follows December 30th every year.
**LEAP-YEAR DAY, June 31 or L, another extra Saturday (a WORLD HOLIDAY), follows June 30th in leap years.

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SOON YOU WILL BE USING THIS UP-TO-DATE CALENDAR.

HOW EASY THE CHANGE

1944

GREGORIAN CALENDAR

SATURDAY, DECEMBER 30

SUNDAY, DECEMBER 31

THE WORLD CALENDAR

SATURDAY, DECEMBER 30

EXTRA SATURDAY, DECEMBER 31

OR 31 (A World Holiday)

1945

THE WORLD CALENDAR

SUNDAY, JANUARY 1

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NEW YORK CITY

Journal of
CALENDAR
REFORM

HELP WIN the WAR and the PEACE
by endorsing a
NEW and BETTER TIME-PLAN

SECOND QUARTER

1942

1942

PRESENT GREGORIAN CALENDAR

FIRST QUARTER							THIRD QUARTER								
S M T W T F S							S M T W T F S								
JAN				1	2	3	JUL				1	2	3	4	
	4	5	6	7	8	9		5	6	7	8	9	10	11	
	11	12	13	14	15	16		12	13	14	15	16	17	18	
	18	19	20	21	22	23		19	20	21	22	23	24	25	
	25	26	27	28	29	30		31	26	27	28	29	30	31	
FEB							AUG								
	1	2	3	4	5	6		7	2	3	4	5	6	7	8
	8	9	10	11	12	13		14	9	10	11	12	13	14	15
	15	16	17	18	19	20		21	16	17	18	19	20	21	22
	22	23	24	25	26	27		28	23	24	25	26	27	28	29
MAR							SEP								
	1	2	3	4	5	6		7	1	2	3	4	5		
	8	9	10	11	12	13		14	6	7	8	9	10	11	12
	15	16	17	18	19	20		21	13	14	15	16	17	18	19
	22	23	24	25	26	27		28	20	21	22	23	24	25	26
	29	30	31					27	28	29	30				
90 days							92 days								
SECOND QUARTER							FOURTH QUARTER								
S M T W T F S							S M T W T F S								
APR				1	2	3	OCT				1	2	3		
	5	6	7	8	9	10		4	5	6	7	8	9	10	
	12	13	14	15	16	17		11	12	13	14	15	16	17	
	19	20	21	22	23	24		18	19	20	21	22	23	24	
	26	27	28	29	30			25	26	27	28	29	30	31	
MAY					1	2	NOV								
	3	4	5	6	7	8		9	1	2	3	4	5	6	7
	10	11	12	13	14	15		16	8	9	10	11	12	13	14
	17	18	19	20	21	22		23	15	16	17	18	19	20	21
	24	25	26	27	28	29		30	22	23	24	25	26	27	28
JUN	31						DEC								
	1	2	3	4	5	6		7	1	2	3	4	5		
	7	8	9	10	11	12		13	6	7	8	9	10	11	12
	14	15	16	17	18	19		20	13	14	15	16	17	18	19
	21	22	23	24	25	26		27	20	21	22	23	24	25	26
	28	29	30					27	28	29	30	31			
91 days							92 days								

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FIRST QUARTER							THIRD QUARTER								
	S	M	T	W	T	F	S		S	M	T	W	T	F	S
JAN	1	2	3	4	5	6	7	JUL	1	2	3	4	5	6	7
	8	9	10	11	12	13	14		8	9	10	11	12	13	14
	15	16	17	18	19	20	21		15	16	17	18	19	20	21
	22	23	24	25	26	27	28		22	23	24	25	26	27	28
FEB	29	30	31					AUG	29	30	31				
MAR								SEP							
91 days							91 days								
SECOND QUARTER							FOURTH QUARTER								
	S	M	T	W	T	F	S		S	M	T	W	T	F	S
APR	1	2	3	4	5	6	7	OCT	1	2	3	4	5	6	7
	8	9	10	11	12	13	14		8	9	10	11	12	13	14
	15	16	17	18	19	20	21		15	16	17	18	19	20	21
	22	23	24	25	26	27	28		22	23	24	25	26	27	28
MAY	29	30	31					NOV	29	30	31				
JUN								DEC							
91 days							91 days								

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1944

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OR 31 (A World Holiday)

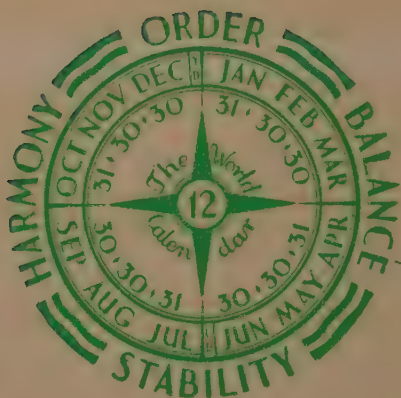
1945

THE WORLD CALENDAR

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HAVE YOU SEEN IT?

THE WORLD CALENDAR EXHIBIT

AT THE

NEW YORK

MUSEUM OF SCIENCE AND INDUSTRY

R. C. A. BUILDING ROCKEFELLER CENTER
NEW YORK CITY

Your Country Needs Your Money
for
VICTORY

BUY WAR BONDS AND STAMPS

Journal of
CALENDAR
REFORM

HELP WIN the WAR and the PEACE
by endorsing a
NEW and BETTER TIME-PLAN

THIRD QUARTER

1912

PRESENT GREGORIAN CALENDAR

FIRST QUARTER							THIRD QUARTER							
JAN	S	M	T	W	T	F	JUL	S	M	T	W	T	F	S
1	2	3	4	5	6	7	1	2	3	4	5	6	7	8
8	9	10	11	12	13	14	8	9	10	11	12	13	14	15
15	16	17	18	19	20	21	15	16	17	18	19	20	21	22
22	23	24	25	26	27	28	22	23	24	25	26	27	28	29
29	30	31					29	30	31					
90 days							92 days							
FEB	S	M	T	W	T	F	AUG	S	M	T	W	T	F	S
1	2	3	4	5	6	7	1	2	3	4	5	6	7	8
8	9	10	11	12	13	14	8	9	10	11	12	13	14	15
15	16	17	18	19	20	21	15	16	17	18	19	20	21	22
22	23	24	25	26	27	28	22	23	24	25	26	27	28	29
29	30	31					29	30	31					
90 days							92 days							
MAR	S	M	T	W	T	F	SEP	S	M	T	W	T	F	S
1	2	3	4	5	6	7	1	2	3	4	5	6	7	8
8	9	10	11	12	13	14	8	9	10	11	12	13	14	15
15	16	17	18	19	20	21	15	16	17	18	19	20	21	22
22	23	24	25	26	27	28	22	23	24	25	26	27	28	29
29	30	31					29	30	31					
91 days							92 days							
APR	S	M	T	W	T	F	OCT	S	M	T	W	T	F	S
1	2	3	4	5	6	7	1	2	3	4	5	6	7	8
8	9	10	11	12	13	14	8	9	10	11	12	13	14	15
15	16	17	18	19	20	21	15	16	17	18	19	20	21	22
22	23	24	25	26	27	28	22	23	24	25	26	27	28	29
29	30	31					29	30	31					
91 days							92 days							
MAY	S	M	T	W	T	F	NOV	S	M	T	W	T	F	S
1	2	3	4	5	6	7	1	2	3	4	5	6	7	8
8	9	10	11	12	13	14	8	9	10	11	12	13	14	15
15	16	17	18	19	20	21	15	16	17	18	19	20	21	22
22	23	24	25	26	27	28	22	23	24	25	26	27	28	29
29	30	31					29	30	31					
91 days							92 days							
JUN	S	M	T	W	T	F	DEC	S	M	T	W	T	F	S
1	2	3	4	5	6	7	1	2	3	4	5	6	7	8
8	9	10	11	12	13	14	8	9	10	11	12	13	14	15
15	16	17	18	19	20	21	15	16	17	18	19	20	21	22
22	23	24	25	26	27	28	22	23	24	25	26	27	28	29
29	30	31					29	30	31					
91 days							92 days							

This calendar has 52 weeks and must borrow from another week to complete the year. This causes the calendar to change every year and is responsible for its confusion. Also note varying number of days in each quarter.

EACH YEAR DIFFERENT

This calendar is always different from year to year.

The quarters are unequal in length. In leap years the first half-year has 182 days; the second, 184 days.

Each quarter begins and ends on a different day of the week.

Each month begins and ends on a different weekday.

The months have a varying number of weekdays.

Each year begins on a different weekday.

This calendar is unbalanced in structure, unstable in form, and irregular in arrangement.

SOON YOU WILL BE DISCARDING THIS OBSOLETE CALENDAR.

PROPOSED WORLD CALENDAR

FIRST QUARTER							THIRD QUARTER							
JAN	S	M	T	W	T	F	JUL	S	M	T	W	T	F	S
1	2	3	4	5	6	7	1	2	3	4	5	6	7	8
8	9	10	11	12	13	14	8	9	10	11	12	13	14	15
15	16	17	18	19	20	21	15	16	17	18	19	20	21	22
22	23	24	25	26	27	28	22	23	24	25	26	27	28	29
29	30	31					29	30	31					
91 days							91 days							
FEB	S	M	T	W	T	F	AUG	S	M	T	W	T	F	S
1	2	3	4	5	6	7	1	2	3	4	5	6	7	8
8	9	10	11	12	13	14	8	9	10	11	12	13	14	15
15	16	17	18	19	20	21	15	16	17	18	19	20	21	22
22	23	24	25	26	27	28	22	23	24	25	26	27	28	29
29	30	31					29	30	31					
91 days							91 days							
MAR	S	M	T	W	T	F	SEP	S	M	T	W	T	F	S
1	2	3	4	5	6	7	1	2	3	4	5	6	7	8
8	9	10	11	12	13	14	8	9	10	11	12	13	14	15
15	16	17	18	19	20	21	15	16	17	18	19	20	21	22
22	23	24	25	26	27	28	22	23	24	25	26	27	28	29
29	30	31					29	30	31					
91 days							91 days							
SECOND QUARTER							FOURTH QUARTER							
APR	S	M	T	W	T	F	OCT	S	M	T	W	T	F	S
1	2	3	4	5	6	7	1	2	3	4	5	6	7	8
8	9	10	11	12	13	14	8	9	10	11	12	13	14	15
15	16	17	18	19	20	21	15	16	17	18	19	20	21	22
22	23	24	25	26	27	28	22	23	24	25	26	27	28	29
29	30	31					29	30	31					
91 days							91 days							
MAY	S	M	T	W	T	F	NOV	S	M	T	W	T	F	S
1	2	3	4	5	6	7	1	2	3	4	5	6	7	8
8	9	10	11	12	13	14	8	9	10	11	12	13	14	15
15	16	17	18	19	20	21	15	16	17	18	19	20	21	22
22	23	24	25	26	27	28	22	23	24	25	26	27	28	29
29	30	31					29	30	31					
91 days							91 days							
JUN	S	M	T	W	T	F	DEC	S	M	T	W	T	F	S
1	2	3	4	5	6	7	1	2	3	4	5	6	7	8
8	9	10	11	12	13	14	8	9	10	11	12	13	14	15
15	16	17	18	19	20	21	15	16	17	18	19	20	21	22
22	23	24	25	26	27	28	22	23	24	25	26	27	28	29
29	30	31					29	30	31					
91 days							91 days							

*YEAR-END DAY, December 31 or Y, an extra Saturday (a WORLD HOLIDAY), follows December 30th every year.
**LEAP-YEAR DAY, June 31 or L, another extra Saturday (a WORLD HOLIDAY), follows June 30th in leap years.

EACH YEAR THE SAME

This 12-month equal-quarter calendar is the same for every year.

The quarters are equal in length.

Each quarter begins on Sunday and ends on Saturday, contains 3 months—13 weeks—91 days.

Month-dates always fall on the same weekdays. Each month has 26 weekdays—plus Sundays.

Each year begins on Sunday.

Year-End Day and Leap-Year Day, the extra Saturdays, are World Holidays.

This revised calendar is balanced in structure, perpetual in form, harmonious in arrangement.

SOON YOU WILL BE USING THIS UP-TO-DATE CALENDAR.

HOW EASY THE CHANGE

1944

GREGORIAN CALENDAR

SATURDAY, DECEMBER 30

SUNDAY, DECEMBER 31

THE WORLD CALENDAR

SATURDAY, DECEMBER 30

EXTRA SATURDAY, DECEMBER 31
OR 31 (A World Holiday)

1945

THE WORLD CALENDAR

SUNDAY, JANUARY 1

HAVE YOU SEEN IT?

THE WORLD CALENDAR EXHIBIT

AT THE

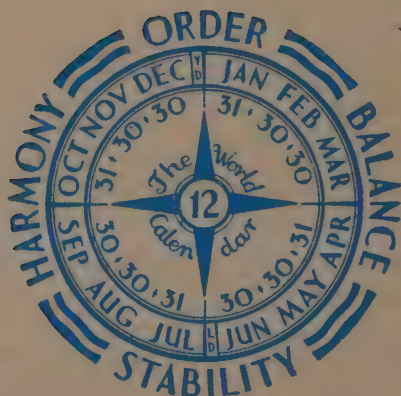
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for

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Journal of
CALENDAR
REFORM

The World Calendar CONSERVES time, effort,
money and material that the present
calendar annually WASTES.

FOURTH QUARTER

1942

1942

PRESENT GREGORIAN CALENDAR

FIRST QUARTER							THIRD QUARTER									
	S	M	T	W	T	F	S		S	M	T	W	T	F	S	
JAN					1	2	3	JUL					1	2	3	4
	4	5	6	7	8	9	10		5	6	7	8	9	10	11	
	11	12	13	14	15	16	17		12	13	14	15	16	17	18	
	18	19	20	21	22	23	24		19	20	21	22	23	24	25	
	25	26	27	28	29	30	31		26	27	28	29	30	31		
FEB								AUG								
	1	2	3	4	5	6	7		2	3	4	5	6	7	8	
	8	9	10	11	12	13	14		9	10	11	12	13	14	15	
	15	16	17	18	19	20	21		16	17	18	19	20	21	22	
	22	23	24	25	26	27	28		23	24	25	26	27	28	29	
MAR	1	2	3	4	5	6	7	SEP								
	8	9	10	11	12	13	14		6	7	8	9	10	11	12	
	15	16	17	18	19	20	21		13	14	15	16	17	18	19	
	22	23	24	25	26	27	28		20	21	22	23	24	25	26	
	29	30	31						27	28	29	30				
90 days							92 days									
SECOND QUARTER							FOURTH QUARTER									
	S	M	T	W	T	F	S		S	M	T	W	T	F	S	
APR					1	2	3	OCT					1	2	3	
	5	6	7	8	9	10	11		4	5	6	7	8	9	10	
	12	13	14	15	16	17	18		11	12	13	14	15	16	17	
	19	20	21	22	23	24	25		18	19	20	21	22	23	24	
	26	27	28	29	30				25	26	27	28	29	30	31	
MAY								NOV								
	3	4	5	6	7	8	9		1	2	3	4	5	6	7	
	10	11	12	13	14	15	16		8	9	10	11	12	13	14	
	17	18	19	20	21	22	23		15	16	17	18	19	20	21	
	24	25	26	27	28	29	30		22	23	24	25	26	27	28	
	31								29	30						
JUN								DEC								
	7	8	9	10	11	12	13		6	7	8	9	10	11	12	
	14	15	16	17	18	19	20		13	14	15	16	17	18	19	
	21	22	23	24	25	26	27		20	21	22	23	24	25	26	
	28	29	30						27	28	29	30	31			
91 days							92 days									

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FIRST QUARTER								THIRD QUARTER									
	S	M	T	W	T	F	S		S	M	T	W	T	F	S		
JAN	1	2	3	4	5	6	7	JUL	1	2	3	4	5	6	7		
	8	9	10	11	12	13	14		8	9	10	11	12	13	14		
	15	16	17	18	19	20	21		15	16	17	18	19	20	21		
	22	23	24	25	26	27	28		22	23	24	25	26	27	28		
	29	30	31						29	30	31						
FEB								AUG									
	1	2	3	4	5	6	7		1	2	3	4	5	6	7		
	8	9	10	11	12	13	14		8	9	10	11	12	13	14		
	15	16	17	18	19	20	21		15	16	17	18	19	20	21		
	22	23	24	25	26	27	28		22	23	24	25	26	27	28		
MAR								SEP									
	1	2	3	4	5	6	7		1	2	3	4	5	6	7		
	8	9	10	11	12	13	14		8	9	10	11	12	13	14		
	15	16	17	18	19	20	21		15	16	17	18	19	20	21		
	22	23	24	25	26	27	28		22	23	24	25	26	27	28		
	29	30	31						29	30	31						
91 days								91 days									
SECOND QUARTER								FOURTH QUARTER									
	S	M	T	W	T	F	S		S	M	T	W	T	F	S		
APR	1	2	3	4	5	6	7	OCT	1	2	3	4	5	6	7		
	8	9	10	11	12	13	14		8	9	10	11	12	13	14		
	15	16	17	18	19	20	21		15	16	17	18	19	20	21		
	22	23	24	25	26	27	28		22	23	24	25	26	27	28		
	29	30	31						29	30	31						
MAY								NOV									
	1	2	3	4	5	6	7		1	2	3	4	5	6	7		
	8	9	10	11	12	13	14		8	9	10	11	12	13	14		
	15	16	17	18	19	20	21		15	16	17	18	19	20	21		
	22	23	24	25	26	27	28		22	23	24	25	26	27	28		
	29	30							29	30							
JUN								DEC									
	3	4	5	6	7	8	9		3	4	5	6	7	8	9		
	10	11	12	13	14	15	16		10	11	12	13	14	15	16		
	17	18	19	20	21	22	23		17	18	19	20	21	22	23		
	24	25	26	27	28	29	30		24	25	26	27	28	29	30		
91 days								91 days									

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AT THE

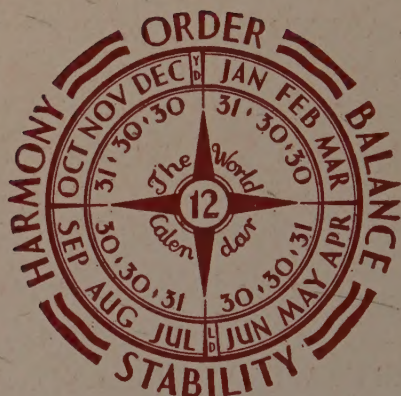
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